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ABSTRACT

There is a potential crisis in caring for the elderly in California as the over-65 population is expected to double by 2020 and several demographic dynamics a lower growth rate in the population segment of women aged 24-54 that traditionally care for seniors; increasing participation of women in the workforce who have traditionally been at-home caregivers for seniors; and a robust economy offering many competing entry-level occupations at comparable or higher wages may contribute to a shortage of caregivers. Legislation passed in July 2000, the Caregivers Training Initiative, directed the Employment Development Department to develop an understanding of the labor supply-demand principles affecting workers in entry-level direct care occupations in relationship to nineteen other comparable occupations competing for the available labor force. Caregiver occupations may be viewed as less desirable compared to competing occupations for the following reasons: (1) wages are often lower; (2) there is less access to affordable benefits such as health insurance; (3) there is a greater chance for occupational injury or illness; (4) there are greater training and certification requirements; and (5) there is less opportunity for advancement. The following suggestions are made to improve caregiver recruitment and retention: conduct exit interviews and identify best practices; develop core competencies and career paths; and give financial incentives. (Contains 6 appendices, 21 exhibits, and 35 references.) (MO)

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The Quest for Caregivers

Helping Seniors Age with Dignity

Employment Development Department
State of California

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The Quest for Caregivers

Helping Seniors Age with Dignity

Employment Development Department
Labor Market Information Division
Information Services Group
Occupational Research Unit

April 2001

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Executive Summary

California Training Initiative (CTI)

California is facing a potential crisis in caring for the elderly as the over-65 population is expected to nearly double by 2020. In July 2000, as part of the Governor's Aging with Dignity Initiative, Governor Davis signed legislation establishing the Caregivers Training Initiative (CTI) to address the impending shortage of caregivers. The CTI focuses on the recruitment, training, and retention of direct caregiver occupations. The Initiative funds a series of regional partnerships to test service delivery methods. The Initiative instructs Employment Development Department (EDD) to study labor supply and demand factors.

Background

Several demographic dynamics contribute to the potential shortage of caregivers:

- A lower growth rate in the population segment (women ages 24-54) that traditionally cares for seniors
- Increasing participation of women in the work force reduces the number of traditional at-home caregivers for seniors and youth
- A robust economy offers many competing entry-level occupations at comparable or higher wages

Apart from the issue of workforce availability to enter caregiver occupations, various studies cite annual turnover rates in caregiver occupations ranging from 42 to over 100 percent.

Scope of Report

Caregiver and Competing Occupations - The CTI legislation also directed the Employment Development Department (EDD) to concentrate on developing an understanding of the labor supply-demand principles affecting workers in entry-level direct care occupations in relationship to other occupations competing for the available labor force. Three entry-level caregiver occupations are the focus of this report: Nurse Aides (including Certified Nurse Assistants), Home Health Aides, and Personal and Home Care Aides.

Entry-level caregiver occupations compete with other entry-level occupations for workers in a tight labor market. Health care providers are on a quest for caregivers, and workers entering the workforce are on a quest for a "good" job. "Good" jobs are defined as jobs that provide a living wage, benefits, and opportunity for advancement.

Nineteen competing occupations were selected for comparison to entry-level caregiver occupations based on the following criteria:

- Expected California job growth of at least 10,000 jobs between 1998 and 2008
- Training requirements ranging from short-term on-the-job training to completion of vocational training provided in post-secondary vocational schools
- Employment which allows workers to provide service to others

Occupational Attributes

Values and Interests - Job satisfaction is directly related to the degree that a person's values and corresponding needs are satisfied by his or her work environment. Job satisfaction leads to employee retention. The *Relationships* work value is one of six work values with twenty-one corresponding needs identified by the Occupational Information Network (O*NET), a comprehensive occupational database developed by the Department of Labor (See *Appendix D*). Occupations that satisfy the *Relationships* work value allow employees to provide service to others and work with co-workers in a friendly non-competitive environment. Persons who are attracted to and would stay in caregiver jobs are persons with a high *Relationships* work value. Persons with a low *Relationships* value are not well suited for caregiver occupations.

While a high *Relationships* work value might attract workers who possess that value to caregiver occupations, the same value could create a values conflict if wages and benefits would not allow them to provide sufficiently for their family, or staff-to-patient workload might not allow them to provide the quality of care they think is needed. Such value conflicts could cause workers to reluctantly leave caregiver occupations.

Along with values, interests contribute to work satisfaction. Interest patterns are quite similar for caregiver and competing occupations. The similarity of interest factors in caregiver and competing occupations offers both positive and negative implications for caregiver employers. The positive note is that workers in those competing occupations could also find a person-work environment fit for themselves in caregiver occupations, other factors being equal. On the negative side, the similarity in interest types makes it easier for workers to leave caregiver jobs for the competing occupations and still remain in a work environment that fits their personality type.

Skills, Knowledge, and Abilities - Comparing the skills, knowledge, and abilities (SKAs) needed to successfully learn and perform the tasks for caregivers in contrast to those needed for competing occupations, several facts emerge:

- There are more similarities than differences in SKAs
- One can generalize that those persons considering caregiver occupations could just as successfully pursue the competing occupations based upon skills, knowledge, and abilities
- Caregivers require more knowledge acquired through a combination of education and on-the-job training. Potential caregivers who like the idea of work where they nurture and contribute to the well being of other people may be intimidated by the classroom training and testing involved for certification if they did not have successful school experiences in the past
- Caregivers require significantly more static strength ability (See Exhibit D.4 in *Appendix D*)
- Caregivers require more knowledge of principles and processes for providing customer and personal services including needs assessment techniques, quality service standards, and alternative delivery systems

The static strength ability requirements for caregiver occupations should be an important consideration in the hiring process to ensure that applicants not only have the strength required, but are able to sustain the strength over the workday. Some of the high turnover in caregiver occupations may be attributed to the high incidence of workplace injury and illness in the health services industry. Back injuries account for almost half the injuries in nursing homes. Only truck drivers and laborers have higher injury rates.

Wages, Benefits, and Hours - In California, entry-level earnings for nurse aides, home health, and personal and home care aides on average fall under the federal poverty guidelines. In fact, in many areas of California the average wage for *experienced* caregiver aides falls below this guideline for workers who have dependents. The difference between wages earned by caregivers and those offered for competing jobs in the labor market is substantial in many cases. Fifty-seven percent of the competing occupations earn more than caregivers at the entry level. Moreover, the opportunity to earn more each year on the job appears limited for caregivers. Seventy-four percent of the competing occupations are more likely to receive medical insurance benefits than caregiver occupations.

Caregiver occupations exist in a 24/7 environment, meaning workers are likely to work weekends and nights. Many competing occupations also require evening or weekend shifts. While these hours may be unappealing to some workers, other people may prefer such hours.

The earnings and benefit gap, paired with the higher responsibilities required for caregivers, may be one reason for the high turnover rate among these workers.

Advancement and Career Ladders - Getting ahead is an important aspect of work. "Not getting ahead" is an oft-given reason for job dissatisfaction and moving on to another job or employer. On average, caregiver occupations offer less opportunity for advancement than the competing occupations. Caregiver occupations are more dependent upon further education for advancement than many of the competing occupations where job performance is a key element for advancement.

Programs exist in partnership with community colleges and the California State University system to create nursing career ladders:

- Nursing Aide to Certified Nursing Assistant
- Certified Nursing Assistant to Licensed Vocational Nurse
- Licensed Vocational Nurse to Registered Nurse

Participation in such career ladders requires an extraordinary degree of commitment from the worker to attend training programs in off-hours when one already has a physically and emotionally demanding job during work hours. Traditionally, education programs in nursing have required full-time student status, which can be a further barrier to workers climbing a career ladder in nursing careers, and requiring an ongoing income while attending extended advancement training.

Conclusions

Caregiver occupations may be viewed as less desirable compared to competing occupations:

- Caregiver wages are lower than many of the competing occupations
- Caregivers have less access to affordable benefits such as health insurance
- Caregivers have a greater chance for occupational injury or illness
- Caregivers have greater training and certification requirements than competing occupations
- Caregivers have less opportunity for advancement

The high turnover level in caregiver occupations suggests that workers find something about the job or working conditions which causes them to leave. It also suggests that the selection process fell short of making an appropriate fit between worker and job.

Occupational Supply Side Strategies

Changing demographics and economic conditions have curtailed the supply of workers available for low-wage occupations that offer little prospect for advancement. Given the supply-demand labor market realities, health care providers could take some of the following steps to more successfully recruit and retain workers in health care occupations:

- **Exit interviews** - Better information regarding the reasons caregivers quit their jobs is needed to determine patterns of turnover and dissatisfaction to help set priorities for change. The health care industry should establish a standard format for exit interviews and share such information through professional associations.
- **Best practices** - The industry should identify those employers who have lower turnover and fewer incidents of occupational injuries and illness. These employers can be looked to for "best practices" in employee scheduling, hiring and selection processes, employee training, and laborsaving techniques that prevent back injuries.
- **Values-based marketing** - Caregiver employers and professional associations need to market caregiver occupations to appeal to the *Relationships* value using television and other media. They need to change the public's view of caregiver occupations.
- **Assessment** - Use available assessment tools in the selection process to obtain appropriate person-job matches for caregiver occupations.
- **Core competencies and career paths** - Develop career ladders and career paths for health care occupations using the National Skills Standard Board process to facilitate portable competencies between health care occupations and reduce redundancy in curriculum content.
- **Financial incentives** - Reward employees financially for staying and recruiting others to the profession. Provide affordable health benefits and paid leave. Use profit sharing or some form of employee ownership to retain workers.
- **Workplace reengineering** - Investigate redesign of caregiver occupations and workplace to include more of the motivating factors: achievement, recognition, responsibility, and advancement. Employers might want to reengineer the workplace so frontline workers can participate in care giving decisions.

There is no one, or easy, answer to make caregiver occupations a "good" job in the eyes of job and career seekers. The most important part of the answer lies in targeting people who would see caregiver occupations as an opportunity to do good; i.e., persons with a high *Relationships* work value. Part of the solution is to improve the wages, benefits, and working conditions. Another facet of the solutions mix is collaboration between health care segments, employee organizations, and educators to establish skill standards and career paths.

The Quest for Caregivers was written from the point of view of persons selecting a job or career and the factors they might consider in making that choice (see Exhibit 3.1). For some seekers, caregiver occupations would not be a good match. For others, a caregiver occupation could add up to a rewarding career choice.

Introduction

Legislation

The 2000-01 Budget introduced the Governor's Aging with Dignity Initiative. The overall legislative intent is to enhance the development of innovative community care options to enable seniors to live in their homes or with their families for as long as possible rather than move into a nursing home.

As part of the Governor's Aging with Dignity Initiative, Governor Davis signed AB 2876 on July 7, 2000.[1] This legislation includes the Caregiver Training Initiative that addresses issues surrounding the impending shortage of caregivers:

- Recruitment
- Training
- Retention

The intent of this legislation is to establish an advisory council to identify strategies and develop recommendations to recruit, train, and retain direct caregivers such as certified nurse assistants, certified nurses, licensed vocational nurses, registered nurses, and to fund regional demonstration projects to address these strategies.

EDD designated

The Caregiver Training Initiative designates the Employment Development Department (EDD) as the administrative entity. As the designated administrative entity, the Department will collaborate with the Department of Social Services to:

- Lead a work group responsible for staff support to the advisory committee;
- Develop the criteria for regional collaborative programs, and the number of staff to be assigned to regions;
- Develop the selection process for funding regional collaborative programs (under the direction of California Health and Human Services Agency);
- Select a program proposal from each region that best meets the established criteria;
- Distribute funds to local agencies to establish the regional programs;
- Evaluate or contract for the evaluation of the regional collaborative programs funded under the Caregiver Training Initiative.

Labor market supply and demand

The Department's role under the Caregiver Training Initiative is to improve the understanding of the labor market supply and demand principles that affect workers in direct care occupations. Specifically, the legislation requires the Department to develop and analyze information on the following factors:

1. Alternative occupations competing for available labor
2. The effect of conditions in other occupations using similar skill sets on the supply of labor in occupations related to health care providers and caregivers
3. Occupational ladders for health care providers and caregivers
4. The efforts by county welfare departments to increase interest in the health care provider and caregiver industry
5. Factors that draw individuals into or push them away from entering the health care provider or caregiver industry
6. Ways that nursing homes, long-term care facilities and in-home care provider communities can improve the quality of employment of health care providers and caregivers
7. The treatment of staff in nursing homes and long-term care facilities
8. Worker compensation claims and claims of workplace violence due to patients with Alzheimer's disease or dementia
9. Benefit packages
10. On-the-job training for career advancement as a health care provider or caregiver in nursing homes or long-term care facilities or advancement in fields related to an occupation as a health care provider or caregiver

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Report

This preliminary report summarizes EDD's initial research and comparative analysis of the caregiver occupations and their competing entry-level occupations to identify the issues affecting caregiver recruitment, training, and retention.

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[1] Assembly Bill AB 2876, (Chapter 108, Statutes of 2000) Chapter 7, 11020 (a) through 11024 (c), Caregiver Training Initiative.

Background

Aging population creates demand

The population of citizens over 65 years of age is expected to nearly double by the year 2020 as the "baby boom" generation approaches the golden years. The growing population of older people presents societal challenges to provide quality health and personal care for this group.

Trends affecting demand

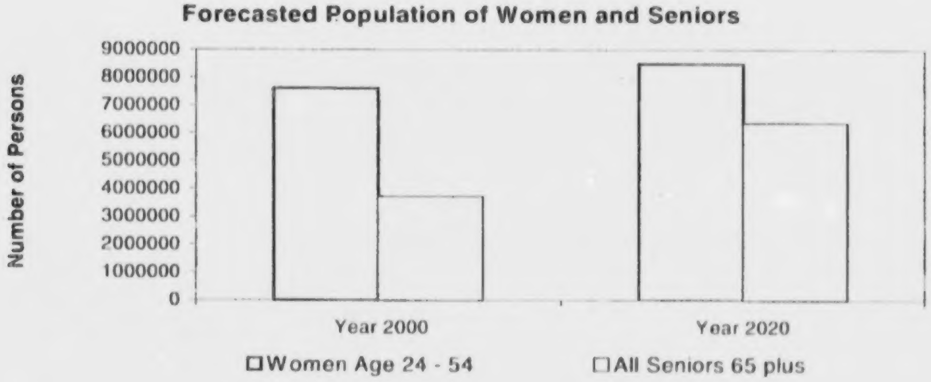
Historically, older family members were frequently cared for at home, often by a relative. In recent years, more women are working outside the home and are unavailable to provide this service. Even new mothers are returning to the labor force in record numbers. Recent Census Bureau data indicates that "in 1998, 59 percent of the 3.7 million women with infants under the age of one year were active participants in the labor market. This number has risen considerably from the 31 percent labor force participation rate of 1976."[1] The increasing trend toward mothers entering or reentering the workforce further decreases the supply of individuals who traditionally cared for the aging population.

Additionally, cultural changes and technological advances have contributed to the increasing mobility of modern society, leading to dramatic changes in the family unit during the last century. It can no longer be assumed that younger family members will live nearby or be available to care for aging family members. Expanded mobility has contributed to the geographic separation of family members, which creates additional demands for caregiver services.

Trends affecting workforce supply

In the past, women 24 to 54 years of age typically cared for seniors. However, the population of potential caregivers is not expected to increase as dramatically as the aging population.[2] The growth rate for women 24 to 54 years of age is slower than that of the baby boom generation, and will not support the increased demand for caregivers as shown in Exhibit 1.1. Further demographic data on males and females may be found in *Appendix A*.

EXHIBIT 1.1 – Forecasted Population of Women and Seniors



Trends affecting workforce supply
(continued)

Employers currently experience difficulty in recruiting and retaining employees in caregiver positions. The situation is exacerbated by the fact that as the population ages, experienced employees currently working in caregiver occupations will begin to retire, further reducing the pool of qualified caregivers.

Another factor affecting workforce availability is an economy that is at its strongest in decades. The result is a very tight labor market with a high availability of entry-level occupations vying for the attention of workforce participants. Many of the competing occupations may offer additional advantages over the caregiver occupations: higher wages and benefits, less formal training requirements, and less physical demand than caregiver occupations.

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Summary

To summarize, the challenge to develop a sufficient supply of well-trained caregivers is significantly affected by:

- A projected doubling of the population over 65 years of age by the year 2020;
- A lower growth rate in the population segment that traditionally cares for seniors;
- Increasing numbers of mothers participating in the workforce further reducing the numbers of the traditional caregivers for seniors and youth;
- An increasing trend toward geographic separation of immediate family members;
- The retirement of aging, experienced caregivers who are no longer available to provide continuing care;
- A robust economy offering many competing entry-level occupations at comparable or higher wages, with less physical demands, available to attract new entrants to the labor market.

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[1] Paraprofessional Healthcare Institute, *A Preventable Labor Crisis Within Long-term Care*, August, 1999, Bronx, New York, p. 1.
Retrieved from: http://www.directcarealliance.org/sections/pubs/preventable2.htm

[2] "Record Share of New Mothers in Labor Force, Census Bureau Reports," *United States Department of Commerce News Release*, October 24, 2000.
Retrieved from: http://www.census.gov/Press-Release/www/

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Caregiver Occupations in Focus

Focus

The Caregiver Training Initiative directed the Employment Development Department to "Develop a strategy to improve understanding of the demand and supply of labor and the labor market dynamics for low-skilled workers who choose occupations such as certified nurse assistants."[1]

The principle entry-level caregiver occupations facing critical shortages and high turnover rates in California are Nursing Aides, Home Health Aides, and Personal and Home Care Aides. Together they represent about 125,000 workers, and comprise the target caregiver occupations in this study.[2]

This section looks at each of the three occupations and describes workforce distribution, turnover and separation rates, supply, job growth, and common tasks performed on the job.

Workforce distribution lists industries where workers are typically employed, such as hospitals, nursing care facilities, or residential care homes. Included with each facility type is the percentage of all workers within the selected occupational group who work in that kind of facility.

Turnover is defined as the annual number of workers needed by a given establishment to replace those who have left. Data were developed based on the assumption that historical trends will continue into the future.

Separations are defined as an estimate of the number of people expected to leave the occupation permanently during a given period, whether for another occupation, retirement, or personal reasons. Data were developed based on the assumption that historical trends will continue into the future.

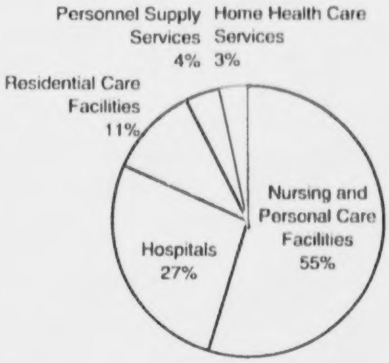
Nurse aides and assistants

(Includes Certified Nursing Assistants (CNAs) and Orderlies)

Nurse Aides work under the direction of nursing or medical staff to provide auxiliary services in the care of patients.

Where do they work? Nurse Aides and Assistants are principally employed in five industries: nursing and personal care facilities, hospitals, residential care facilities, personnel supply services (temporary agencies), and home health care services.

EXHIBIT 2.1 – Distribution of Nurse Aides by Industry



Source: Employment Development Department, Labor Market Information Division; *California Projections of Employment 1998-2008*

Job Growth The *California Projections of Employment* reports there were 88,500 nurse aides working in 1998 and projects 19,400 new positions will be created for the classification Nurse Aides, Orderlies and Attendants between the years 1998 and 2008.[3] This number, along with the 13,700 separations estimated for that time period, brings the number of estimated job openings to 33,100.

What's the supply? A definitive measure of the supply of nurse aides and assistants is not available; however, we do collect information that provides a collateral measure of labor supply problems. Between 1997 and 1999, the California Cooperative Occupational Information System (CCOIS) conducted surveys in 34 California counties, asking 332 employers of nurse aides to indicate the difficulty in finding applicants (trained or untrained). Results appear in Exhibit 2.2 below.

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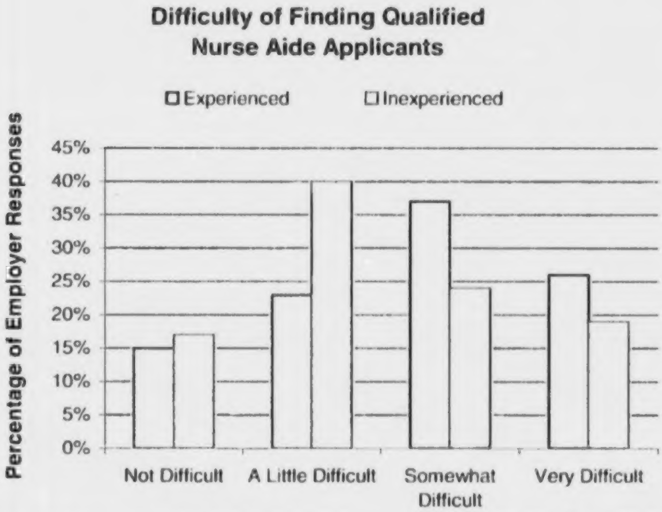
EXHIBIT 2.2 – Difficulty in Finding Nurse Aide Applicants Who Meet Employers' Hiring Standards



Source: Employment Development Department/Labor Market Information Division; California Cooperative Occupational Information System; 1997, 1998, 1999 data

Separation and turnover rates

The Labor Market Information Division projects a 16 percent separation rate of nurse aides between 1998 and 2008, or 13,700 workers. These figures estimate the number of workers who will leave the occupation permanently for other types of work or retirement and do not represent the thousands of nurse aides who leave the job and return to the same type of work a few months later.

Turnover for this occupation is another picture altogether. The "*Hidden Health Care Workforce*"[4] study published in 1999 by the California Twenty-First Century Workforce Project at University of California, San Francisco, reports a turnover rate of *over 100 percent annually* for nurse aides. Presuming their estimate is accurate, this means every year the average California nursing home employer needs to hire more nurse aides than the total number of nurse aide positions within the firm.

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Tasks

Nursing Aides, Orderlies and Assistants perform the following tasks on a daily basis:

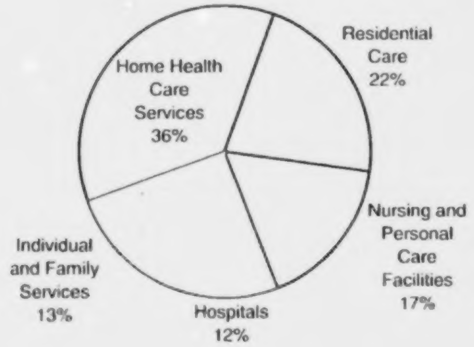
Patient Care – These duties include feeding patients, assisting with personal hygiene, measuring and recording food and liquid intake and output, measuring and recording vital signs, helping patients to walk, lifting or transporting ill or injured persons, and observing and understanding body response variations. CNAs can also administer some medications and use on-line medical record systems.

Non-patient Duties – These include setting up and cleaning procedure equipment, processing patient records, and scheduling appointments.

Home Health Aides
Care for elderly, convalescent, or disabled person in the home of the patient. Perform duties such as changing bed linen; preparing meals; assisting in and out of bed; bathing, dressing, and grooming; administering oral medications under doctors' orders or direction of nurse.

Where do they work? Home Health Aides are employed principally in the following five industries: home health care services, residential care facilities, nursing and personal care facilities, hospitals, and individual and family services.

EXHIBIT 2.3 – Distribution of Home Health Aides by Industry



Source: Employment Development Department, Labor Market Information Division; *California Projections of Employment 1998-2008*

Job Growth Home Health Aide is one of the fastest growing occupations in California, ranking 19th of all occupations. The *California Projections of Employment* estimates there were 23,300 home health workers employed in 1998 and projects a total of 11,300 new positions will be created between the years 1998 and 2008. This number, along with the 4,000 separations estimated for that time period, represents a 48 percent growth rate and brings the number of estimated job openings to 15,300 for the ten-year period.

These numbers do not represent self-employed workers, which could include as many as 40,000 additional workers. The Department of Health Services reported 62,767 certified home health aides on "active status" in California in November 2000.[5]

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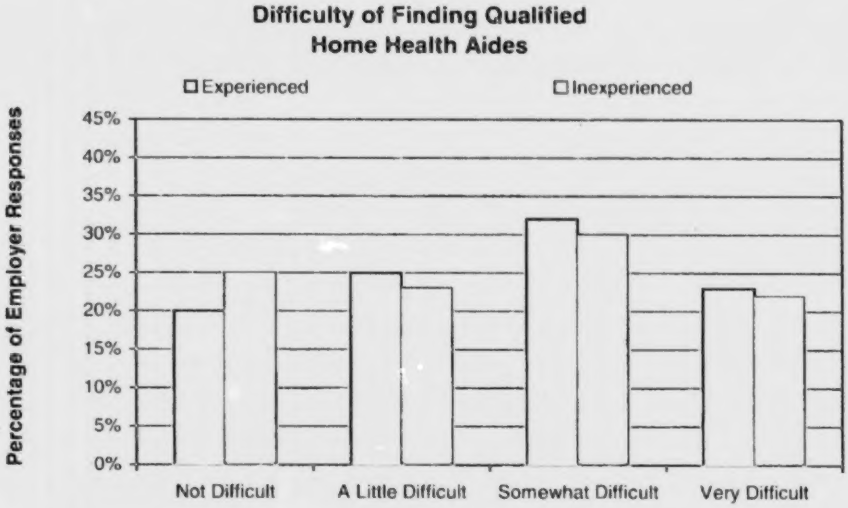
Home Health Aides (continued)

Separation and turnover rates Based upon national trends, the Labor Market Information Division projects 35 percent of home health workers will separate from their jobs for other types of work or retirement between 1998 and 2008.

What's the supply of home health aides? Over the 1997-1999 period, 292 employers in 22 California counties or large metropolitan areas were surveyed by the CCOIS and asked to gauge their difficulty in finding home health aides, trained or untrained.

EXHIBIT 2.4 – Difficulty in Finding Home Health Aide Applicants Who Meet Employers' Hiring Standards



Source: Employment Development Department/Labor Market Information Division; California Cooperative Occupational Information System; 1997, 1998, 1999 data

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Tasks

Some of the important occupation-specific tasks Home Health Aides may perform includes changing bed linens, assisting patients into and out of bed, to the lavatory, and up and down stairs. They give prescribed oral medication under written directions; purchase, prepare, and serve food for patient and other members of family following special prescribed diets. They massage the patient and apply preparations and treatment, such as liniment or alcohol rubs and heat-lamp stimulation. They maintain records of services performed and of the apparent condition of patients. They entertain the patient by reading or playing games. They may also obtain household supplies and run errands.

Personal and Home Care Aides

(Alternate Titles: In-home-support services (IHSS) Workers, Companions)

Perform a variety of tasks at a place of residence, such as bathing, cooking, feeding, shopping, and keeping house.

Where do they work?

Over 90 percent of Personal and Home Care Aides work inside single family dwellings. The remaining workers are found in residential care or adult day care facilities, employed by residential care facilities, home health care services, individual and family services, and nursing and personal care facilities.

In-home supportive services (IHSS)

Most personal and home care aides are hired through the In-Home Supportive Services (IHSS) program, under the direction of the Department of Social Services, providing personal home care services for eligible low-income seniors, the blind, and disabled to enable them to remain in their homes.

There are three modes of service delivery for IHSS services:

- *Homemakers* are county employees who work for the blind or disabled. There are a very small number of homemakers.
- *Individual Providers* comprise the vast majority of IHSS employees.
- *Contract Counties* employ a third party contractor who assigns providers to the recipients and produces provider payroll checks. There are approximately twelve contract counties.

Generally, the recipient of home services acts as the employer making hiring and training decisions.

Legislation, AB 1682, passed on July 12, 1999 requires every county to establish an employer of record for IHSS employees by January 1, 2003. The counties may establish either a public authority or a nonprofit consortium to act as an employer of record. The establishment of an employer of record provides IHSS employees with a means to negotiate for wage and benefit increases. Currently, there are eight public authority counties.

Wages are paid from a combination of federal, state, and county funds. The most usual payment combination is from state and county funds. IHSS provider wage rates may vary from county to county. Contract counties and larger counties such as San Francisco and Los Angeles tend to pay a little more.

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Job Growth

The *California Projections of Employment* estimates a total of 6,200 new positions will be created for the classification Personal and Home Care Aides between the years 1998 and 2008. This number, along with the 4,400 separations estimated for that time period, brings the number of estimated openings to 10,600. This figure clearly underestimates the numbers of these aides, due to the nature of their employment.

According to the California Department of Social Services, there are about 230,000 in-home-supportive services (IHSS) workers employed in California residences and paid for from a number of government funding sources.[6] In addition to these workers are many uncounted aides who are self-employed and paid directly by the client or family. These workers are employed in the Private Household industry, which is not tracked by the California Projections of Employment.

Separation and turnover rates

Based on national trends, the Labor Market Information Division projects a 32 percent separation rate of Personal and Home Care Aides between 1998 and 2008.

What's the supply for personal and home care aides?

Over the 1997-1999 period, 54 employers in four California counties or large metropolitan areas were surveyed by the CCOIS and asked to gauge their difficulty in finding inexperienced personal and home care aides, trained or untrained. The results in Exhibit 2.5 show 77 percent of all employers reported some degree of difficulty in finding workers for their vacancies, with 24 percent indicating no difficulty in recruiting.

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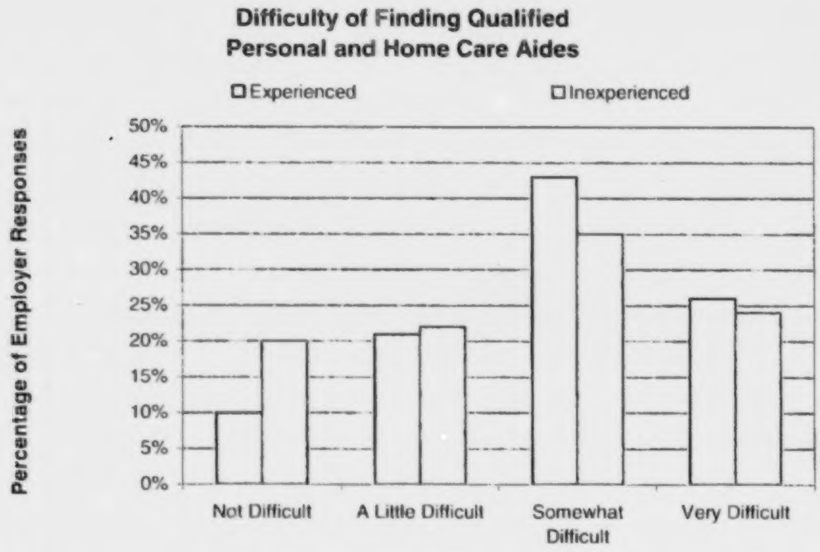
EXHIBIT 2.5 – Difficulty in Finding Personal and Home Care Aides Who Meet Employers' Hiring Standards



Source: Employment Development Department/Labor Market Information Division; California Cooperative Occupational Information System; 1997, 1998, 1999 data

Tasks

Personal and home care aides advise and assist family members in planning nutritious meals; purchasing and preparing foods, and using commodities from surplus food programs.

They regularly assist the client with dressing, undressing, and toilet activities, and explain and demonstrate hygiene principles. Aides regularly provide social stimulation to the client, playing games and conversing. They train family members to provide bedside care, evaluate the needs of the individual served, and plan for continuing services. Aides prepare and maintain records of assistance given, and may obtain information for clients for personal and business purposes.

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[1] Assembly Bill 2876 Chapter 7, 11022c, 1-10.

[2] Employment Development Department, Labor Market Information Division, *California Projections of Employment 1998-2008.*

[3] Ibid.

[4] *The Hidden Health Care Workforce: Recognizing, Understanding and Improving the Allied and Auxiliary Workforce.* Center for Health Professions, University of California, San Francisco, July 1999, p. 71.

[5] California Department of Health Services, November 2000. Note: This figure may change substantially due to new regulations that include criminal background checks upon biennial renewal.

[6] California Department of Social Services, November 2000.

How Did I End Up in This Job? The Job Selection Process

Point of view

Numerous articles and reports exist about the shortage of caregivers. Many of these are written from the point of view of health care administrators and policy planners facing mounting staffing crises. Others are written from the point of view of families trying to find appropriate care for their loved ones. Some studies are written from the perspective of employee representatives concerned with working conditions for caregivers.

This study examines caregiver occupations from another point of view—the job seeker and the employment and training staff assisting job seekers. When an individual is entering the world of work, what leads them to select, or not select, caregiver occupations?

How did I end up in this job?

"How did I end up in this job?" is a question everyone has asked themselves at some time in their work life. If one asks that question often, the questioner is likely in an occupation that is not a good match for their skills, knowledge, abilities, interests, or values. A suitable person-job fit has not been made. How did they get there?

A fortunate few persons seem to be "called" to a vocation and know from early years what kind of work they want to do. Others receive vocational guidance in school. Many others arrive at a time in their life when they must find employment and have no answer to the blank on the application form that asks "Type of work you are seeking." Their response often is *anything*—an answer that they hope communicates their willingness and eagerness to work. What that answer actually signals is that the person needs help: Help in knowing themselves; help in understanding the world of work; help in assessing their options; help in making an employment and training plan; and help in seeking a job that matches that plan. Relatively few people obtain that kind of help or go through the steps that lead to a career plan.

Happenstance frequently plays a role in finding employment—particularly in low wage jobs. Most individuals possess a limited view of the possible work opportunities available to them. Their view of the world of work is formed from the jobs held by their family and friends and what they might see portrayed on television which adds up to a fairly narrow picture. One's social circle greatly influences the job choices an individual makes.

Finding a job Both job seekers and employers use a variety of approaches to find a job or fill a vacancy. Job search methods can be categorized into two types of strategies: Informal and Formal.

Informal

Studies of job search methods over the last 20 years report that between 25 and 60 percent of hires come from informal job search strategies.[1]

Informal job search methods, often referred to as networking, involve informing friends, relatives, acquaintances, and neighbors one is seeking employment and asking their advice. Getting jobs through other people is the most successful method to find employment, especially in low wage jobs.

Employers prefer the informal job search for several reasons:

- Cost is non-existent compared to the formalized search methods of employment agencies and newspaper advertising
- It is easy to limit the size of the applicant pool
- People refer those whom they judge would fit in the organization and reflect well on them
- Employee referrals effectively screen for the "soft skills" such as work habits and ability to get along with coworkers, customers, and supervisors
- Turnover is lower for employees found through informal recruitment means

What is missing in this informal social network of job seeking is any assurance that the job seeker is pursing a job that will be a good match for them. Their need to have a job may be met without developing self-knowledge or applying any criteria as to the job's appropriateness for their skills, knowledge, abilities, values, interests, or even financial needs.

Formal

Formal job search methods include public and private employment agencies, unions, school placement services, and advertising through newspapers and other media such as the Internet or even a "Help Wanted" sign in the window.

Finding a job (continued)

Employers find both advantages and disadvantages to the formalized recruitment methods.

Advantages	Disadvantages
○ Some agencies screen and refer only qualified applicants	○ Agency fees
○ Generates a larger applicant pool when needed	○ Advertising costs
	○ Unscreened applicants from some agencies and newspaper
	○ May generate an excess of applications that require costly processing

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Does the job fit?

Whichever job search method they use, most people take the first job they are offered.[2] Job seekers may follow the crowd of their social peers to a job that is not a good fit for them although they meet the minimum qualifications. Social networks may be ethnically homogeneous which sometimes lead to ethnic groups clustering in occupational niches.[3] While this might make the job easier to obtain for those with access to that social network, the very ease of access may divert job seekers from exploring a wider range of job opportunities.

Do job seekers fare better in obtaining an appropriate job match for themselves if they use an employment agency? Not necessarily. Agency personnel are often paid on commission based on placements made. Thus, it is in their financial interest to place as many people as possible. They will assess the ability or potential of the person to do a job adequately so they refer only qualified applicants to the employer. However, they probably are less concerned, if even aware, whether the applicant would be happy with the type of job. The job seeker who walks into a private, for-profit agency and states *anything* as their job objective is putting their future in the hands of others who will direct them to the opportunity of the moment. Happenstance then determines whether a job is a satisfying match for their skills, knowledge, abilities, interests, and values.

A "good" job?

Having achieved their goal of getting a job, job seekers begin to realize all jobs are not created equal and determine that what they really want is a "good" job. "Good," of course, lies in the eyes of the beholder, but the qualities most persons desire in their employment are found in what is known as the primary labor market. Primary labor market is a term used by sociologists who divide the world of work into primary and secondary labor market segments.[4]

A "good" job?
(continued)

Characteristics of Primary Labor Market Jobs[5]

- Reasonable job security
- On the-job-training
- Opportunities for advancement
- Equitable pay and benefits
- Usually with large firms
- Often unionized

Characteristics of Secondary Labor Market Jobs

- Low wages
- Few or no benefits
- Short term employment
- Low skill requirements
- Little training offered
- Not much opportunity for advancement
- Usually with smaller firms
- High turnover

Secondary labor market jobs are generally filled by youth, minorities, and other disadvantaged workers without the education or skills to access the primary labor market jobs. As workers grow both in job skills and job search skills, they will seek the greener pastures of organizations offering primary labor market jobs.

Finding those "good" jobs can be elusive. It is not as simple as targeting the large organizations. One outcome of recent trends to flexible and leaner operations is that more organizations maintain a core of well-paid workers and use temporary workers for peripheral tasks or contract out those tasks to other firms. Thus an organization may be made up of both primary and secondary labor market jobs.

Implications for recruitment and retention

Entry-level caregiver jobs are competing with other kinds of entry-level jobs. Exhibit 3.1 replicates a typical career exploration and decision-making worksheet. Such evaluation tools are used in career resource centers with youth and adults to compare information about career and job opportunities and make decisions based on a combination of objective and subjective information. How will caregiver occupations fare as job seekers assess the entry opportunities available to them in caregiver occupations as compared to other entry-level job opportunities?

EXHIBIT 3.1 – Sample Career Choice Evaluation Sheet

Factors in a Career Choice Listed below are aspects of a career or job choice that can make the difference between your satisfaction or dissatisfaction. Consider each factor in relation to your preferences and needs. Use career center staff and resources to help you find the information. Talk to people in the field. Indicate with a + or – sign whether an occupation satisfies your preferences for each factor.	**Occupation #1**	**Occupation #2**	**Occupation #3**	**Occupation #4**
Specific Work Performed *What tasks are performed in the job? Would I be primarily working with people, information, or things? Is that what I want to do? Are these the kind of people I like to help or serve?*				
Skills, Knowledge, and Abilities *Do I possess the skills and abilities needed to enter the occupation?* *Do I have the potential to develop them?* *Do I enjoy using these skills?*				
Preparation *Am I willing and able to get the training required?* *Do I have the time and money needed for training?* *Are there different ways to enter the occupation?*				
Physical Capability *Am I physically able to do this kind of work?*				
Work Setting *Where would I work? Is this a setting I would like?* *What are the conditions (indoors/outdoors, noisy, etc?)*				
Values *Is this work compatible with my values?* *Will this kind of work help me reach my long-range goals?*				
Interests *Would I like this kind of work enough to make it a career?*				
Hours *What are the usual hours? Full-time or part-time? Is shift work required?*				
Compensation *What salary could I expect at the entry level? What do experienced workers earn? Are there chances for overtime or bonuses?* *What kind of benefits could I expect in this field?* *Does the salary meet my needs?*				
Licenses and Certificates *Are certificates or licenses required? Can I qualify for them?*				
Employment Opportunity *What are my chances for finding work in this field?* *Are there job openings now? In the future? Where are they?* *Will I be competitive?*				
Opportunity for Advancement *What are my chances of moving up in the field?* *What is the typical way to advance?* *Am I willing and able to do what it takes to advance?*				
Results: *Total the number of positive responses (+) for each occupation under consideration. Which occupation is the best match for you?*				

Source: Employment Development Department, Labor Market Information Division

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[1] Julia R. Henly, "Mismatch in the Low-Wage Labor Market: Job Search Perspective," in *The Low-Wage Labor Market: Challenges and Opportunities for Economic Self-Sufficiency*, The Urban Institute, Washington, D.C., 1999.
Retrieved from: http://aspe.hhs.gov/hsp/lwlm99/henly.htm

[2] Robert Wegman et al., *Work in the New Economy*, JIST Works, Inc., Indianapolis, IN, 1989, p. 91.

[3] Henly, p 4.

[4] Ibid., p. 103.

[5] Wegman, p. 103

The Competition

The caregiver choice

Picture an inexperienced job seeker about to venture forth into the world of work. Many occupational choices are possible for the neophyte job seeker—even those who possess only basic education and training. Why would that job seeker choose a caregiver occupation?

Availability: Caregiver occupations are widely available in all communities.

Preparation: Caregiver occupations require short-term training. On-the-job training often is available.

Work Values: Caregivers provide service to others. Work values are overall qualities of work important to a person's satisfaction. The work value, *Relationships,* is the highest value for caregiver occupations. Occupations that satisfy the *Relationships* work value allow employees to provide service to others and work with co-workers in a friendly non-competitive environment.

Often work values are not a conscious consideration in career choice. Consequently, employee dissatisfaction may result when personal and work values are not in synch. Such mismatches and dissatisfaction can be reflected in lower employee retention rates.

Criteria for competing occupations

Potential candidates for caregiver occupations can consider a wide range of occupations with similar training and wages as they make their career choices. Competing occupations were selected for comparison with caregiver occupations based on the following criteria:

- Expected California job growth of at least 10,000 jobs between 1998 and 2008
- Training requirements ranging from short-term on-the-job training to completion of vocational training provided in post-secondary vocational schools
- O*NET *Relationship* value of 50 or above, on a scale of 100, indicating at least a moderate opportunity to provide services to others and satisfy the *Relationship* value[1]

Criteria for competing occupations
(continued)

Labor Market Information Division (LMID) staff identified 19 occupations that meet these criteria. The occupations are listed in Exhibit 4.1 along with three entry-level caregiver occupations highlighted in bold. Persons seeking employment with little or no training could reasonably expect to discover and consider any of these occupations during their career exploration or job search activities.

Note: One exception was made to the job growth criteria—Emergency Medical Technicians and Paramedics. While the projected job openings are fewer than 10,000, it is possible the actual demand for emergency ambulance services will accelerate beyond projections as the aging population swells.

EXHIBIT 4.1 - Competing Occupations

Occupation	25th Percentile Wages[2]	Training**[3]	Projected Number of Job Openings* 1998-2008[4]
Adjustment Clerks (Customer Service Representatives)	$10.41	Short OJT	18,300
Cashiers	$6.27	Short OJT	217,500
Child Care Workers	$6.70	Short OJT	17,200
Combined Food Preparation and Service Workers	[a]$6.07	Short OJT	137,800
Correctional Officers and Jailers	$18.27	Long OJT	22,200
Counter Clerks & Rental Clerks	$6.33	Short OJT	38,400
Dental Assistants	$10.63	Moderate OJT	20,300
Emergency Medical Technicians and Paramedics	$8.24	Vocational Classes	7,800
Fitness Trainers and Aerobics Instructors	$10.15	Moderate OJT	15,700
Food Preparation Workers	$6.54	Short OJT	99,700
General Office Clerks	$8.64	Short OJT	191,300
Home Health Aides	**$7.15**	**Short OJT**	**15,300**
Medical Assistants	$10.00	Moderate OJT	44,000
Nursing Aides, Orderlies, and Attendants	**$7.23**	**Short OJT**	**33,100**
Personal and Home Care Aides	**$6.61**	**Short OJT**	**10,600**
Receptionists and Information Clerks	$8.05	Short OJT	87,100
Retail Salespersons	$6.50	Short OJT	234,400
Security Guards	$6.78	Short OJT	89,600
Shipping, Receiving and Traffic Clerks	$7.83	Short OJT	31,500
Social and Human Service Assistants	$9.40	Moderate OJT	15,600
Teacher Assistants	$7.94	Short OJT	33,600
Waiters and Waitresses[b]	[a]$6.04	Short OJT	165,100

*Growth Plus Openings Due to Separations

**OJT = On-the-Job Training. Also see Appendix B for training definitions.

Short OJT less than one month; **Moderate OJT** is one to 12 months; **Long OJT** is more than 12 months

[a] Minimum wage raised to $6.25 an hour effective January 1, 2001. [b] Data on tips not provided.

Source: Employment Development Department/Labor Market Information Division

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EXHIBIT 4.2 – Brief Descriptions of Competing Occupations

Adjustment clerks (customer service representatives)	Interact with customers to provide information in response to inquiries about products and services and to handle and resolve complaints. Exclude individuals whose duties are primarily sales or repair.
Cashiers	Receive and disburse money in establishments other than financial institutions. Usually involves use of electronic scanners, cash registers, or related equipment. Often involved in processing credit or debit card transactions and validating checks.
Child care workers	Attend to children at schools, businesses, and institutions. Perform variety of tasks such as dressing, feeding, bathing, and overseeing play. Does not include preschool teachers or teacher aides.
Combined food preparation and service workers	Perform duties that combine both food preparation and food service.
Correctional officers and jailers	Guard inmates in penal or rehabilitative institution in accordance with established regulations and procedures. Includes deputy sheriffs who spend the majority of their time guarding prisoners in county correctional institutions.
Counter and rental clerks	Receive orders for repairs, rentals, and services. May describe available options, compute cost, and accept payment.
Dental assistants	Assist dentist at chair, set up patient and equipment, keep records, and perform related duties as required.
Emergency medical technicians and paramedics	Administer first aid treatment and transport sick or injured persons to medical facility, working as a member of an emergency medical team.
Fitness trainers and aerobics instructors	Instruct or coach groups or individuals in exercise activities and the fundamentals of sports. Demonstrate techniques and methods of participation. Observe participants and inform them of corrective measures necessary to improve their skills.
Food preparation workers	Perform a variety of food preparation duties other than cooking, such as preparing cold foods and shellfish, slicing meat, and brewing coffee or tea.
General office clerks	Varied clerical duties assigned in accordance with the office procedures of individual establishments that may include a combination of bookkeeping, typing, stenography, office machine operation, and filing.

EXHIBIT 4.2 – Brief Descriptions of Competing Occupations (continued)

Medical assistants	Perform administrative and certain clinical duties under the direction of physician. Administrative duties may include scheduling appointments, maintaining medical records, billing, and coding for insurance purposes. Clinical duties may include taking and recording vital signs and medical histories, preparing patients for examination, drawing blood, and administering medications as directed by physician.
Receptionists and information clerks	Answer inquiries and obtain information for general public (e.g., customers, visitors, and other interested parties). Provide information regarding activities conducted at establishment; location of departments, offices, and employees within organization; or services in a hotel.
Retail salespersons	Sell to the public any of a wide variety of merchandise, such as furniture, motor vehicles, appliances, or apparel. Include workers who sell less expensive merchandise where a knowledge of the item sold is not a primary requirement. Does not include cashiers.
Security guards	Stand guard at entrance gate or walk about premises of business or industrial establishment to prevent theft, illegal entry, fire, vandalism, violence, or infractions of rules. Direct patrons or employees and answer questions relative to services of establishment. Control traffic. May use a patrol car.
Shipping, receiving, and traffic clerks	Verify and keep records on incoming and outgoing shipments. Prepare items for shipment. Duties include assembling, addressing, stamping, and shipping merchandise or material; receiving, unpacking, verifying, and recording incoming merchandise or material; and arranging for the transportation of products.
Social and human service assistants	Assist professionals from a wide variety of fields, such as psychology, rehabilitation, or social work, to provide client services, as well as support for families. May assist clients in identifying available benefits and social and community services and help clients obtain them. May assist social workers with developing, organizing, and conducting programs to prevent and resolve problems relevant to substance abuse, human relationships, rehabilitation, or adult daycare.
Teacher assistants	Arrange work materials, supervise students at play, and operate audio-visual equipment under guidance of a teacher.
Waiters and waitresses	Take food orders and serve food and beverages to patrons in dining establishments.

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[1] Department of Labor, O*NET (Occupational Information Network), 1998. O*NET contains over 450 standardized descriptors of skills, abilities, interests, values, knowledge, and work content.

[2] Employment Development Department, Labor Market Information Division, *OES Employment and Wages by Occupations 1999.*
Retrieved from: http://www.calmis.ca.gov/file/occup$/oes$.htm

[3] Employment Development Department, Labor Market Information Division, *Employment Projections by Occupation.*
Retrieved from: http://www.calmis.ca.gov/htmlfile/subject/occproj.htm

[4] Ibid.

Skills – Knowledge - Abilities

SKAs

Skills, knowledge, and abilities (SKAs as personnel analysts often refer to them) are the building blocks of occupations and their associated tasks. Any given job has requirements for the type and level of skills, knowledge, and abilities needed to satisfactorily perform the job. Personnel recruiters seek a good match between the skills, knowledge, and abilities stipulated by the job and the SKAs found in job applicants.

Likewise, each applicant for a job has a distinctive combination of skills, knowledge, and abilities to offer employers. These SKAs are acquired through previous work and life experiences as well as training and education. Skills are portable and go with workers as they change jobs or careers.

Skills that are common to many occupations are known as cross-functional or transferable skills. Communication skills, for example, are important to many different kinds of jobs.[1]

Skills analysis

Employers identify the SKAs required for a job through job analysis that specifies the tasks to be performed and the knowledge, skills, abilities, and other personal characteristics necessary to do the work. Job analysis assesses the relative frequency and importance of the tasks, skills, and abilities. Job analysis is the means of linking the content of the job with the content of training and assessment.[2]

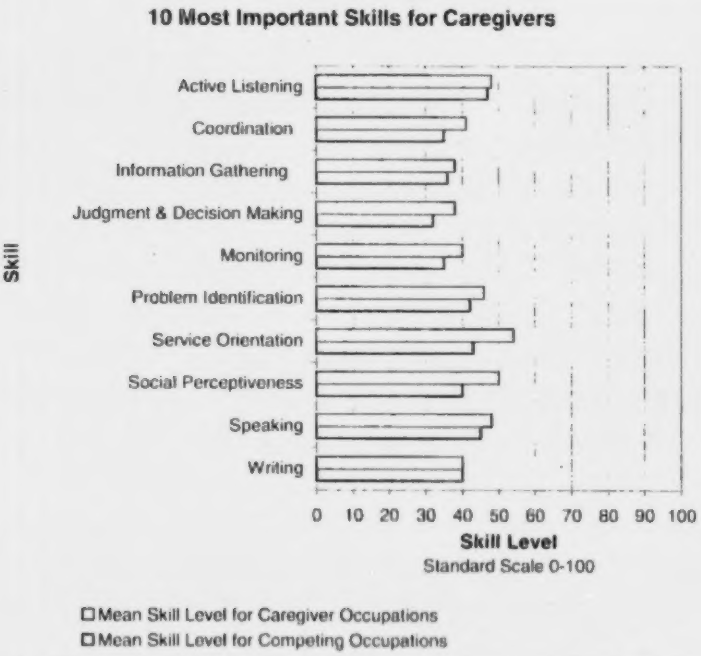
Individuals assess their skills when entering the workforce or changing jobs to determine the job opportunities that would best match their present SKAs and/or what kind of SKAs they need to acquire for the workplace. For some individuals this analysis may be as casual as comparing themselves to requirements posted in want ads. Other individuals may participate in a formal analysis of their SKAs through testing and evaluation in a career resource or assessment center. Many self-help books, such as Richard Bolles' *What Color Is Your Parachute,*[3] help individuals identify their skills. Such skills self-assessment tools enable individuals to make occupational choices based upon more understanding of themselves in relation to workplace needs.

Employers and job seekers are both searching for the best match that they can get between the worker's SKAs and the job's requirements.

Ten most important caregiver skills

Exhibit 5.1 shows the ten most important skills for caregiver occupations and compares the level of skills needed for caregivers to those required by competing occupations. Caregiver and competing occupations are quite close in skill levels required. Caregiver requirements are slightly higher for *Service Orientation* and *Social Perceptiveness*. Skill definitions and standard scale with benchmark labels may be found in Appendix D.

EXHIBIT 5.1 - Skill Level Comparison of Caregiver and Competing Occupations for the 10 Most Important Skills for Caregiver Occupations



Source: Trefoil, *Occupational Viewer 2000* with O*NET in it

Ten most important skills for competing occupations

Caregiver and competing occupations share eight of the ten most important skills. The difference is in four skills: *judgment & decision making* and *monitoring* make the caregiver top ten, but *mathematics* and *reading comprehension* replace them in the competing occupations' top ten. Exhibit 5.2 lists the ten most important skills for the competing occupations and the level of skill required for both competing occupations and caregiver occupations. The required level for caregivers again somewhat exceeds those required of the competing occupations.

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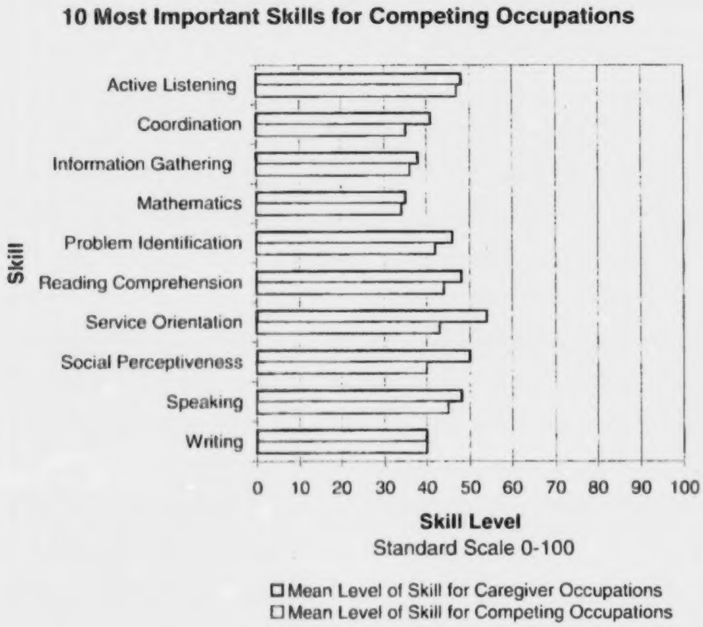
EXHIBIT 5.2 - Skill Level Comparison of Caregiver and Competing Occupations for the 10 Most Important Skills in Competing Occupations



Source: Trefoil, *Occupational Viewer 2000* with O*NET in it

Caregivers and workers in the competing occupations have comparable skills. The skill levels demanded by these occupations are moderate. Based upon skill level requirements alone, job seekers could easily choose from among any of the caregiver and competing occupations.

Knowledge

The Occupational Information Network (O*NET) defines knowledge "as a collection of discrete but related and original facts, information, and principles about a certain domain."[4] Knowledge is acquired in a variety of ways: study, observation, investigation, and experience—both work and avocational. Some knowledges are more general than others in that they are essential to successful performance in diverse kinds of jobs, while other knowledges are occupation-specific.

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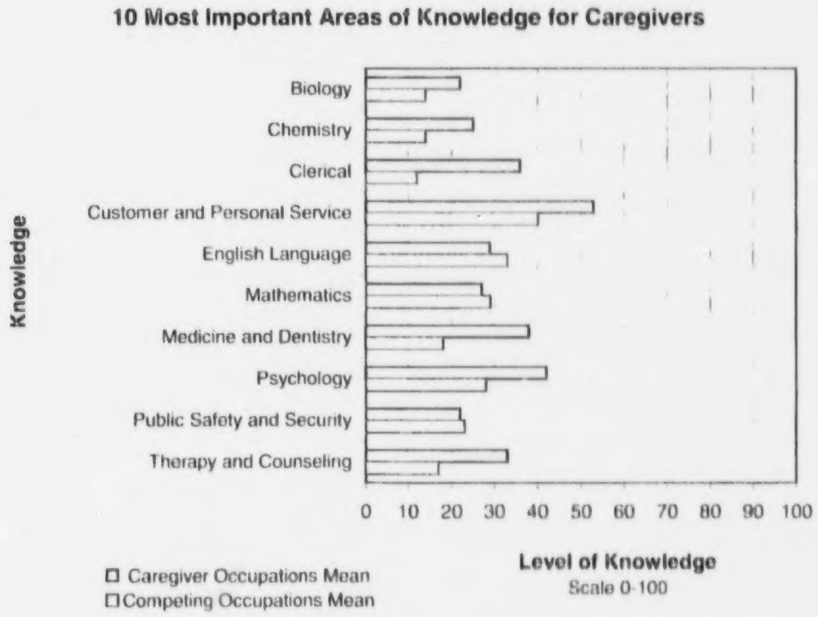
Knowledge
(continued)

Caregiver and competing occupations share six common general knowledges out of their ten most important areas of knowledge:

- Clerical
- Customer and Personal Service
- English Language
- Mathematics
- Psychology
- Public Safety and Security

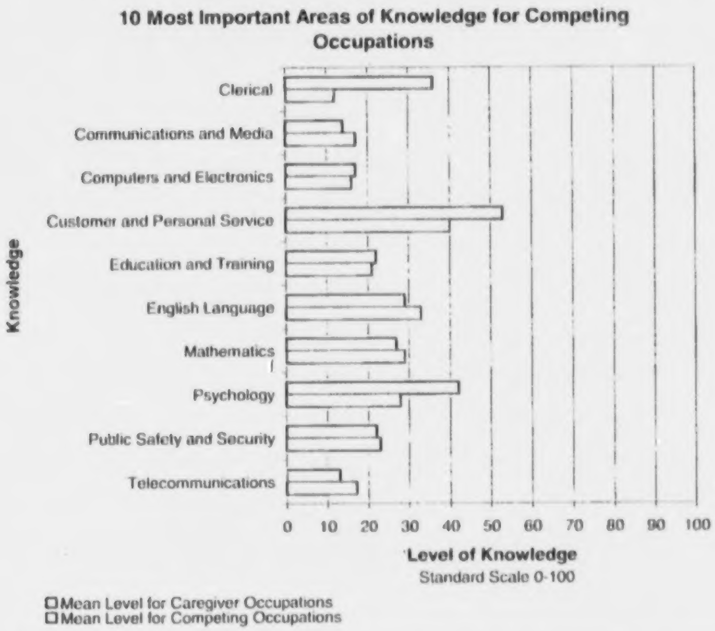
Exhibits 5.3 and 5.4 show the ten most important areas of knowledge that caregiver and competing occupations use and compare the level of knowledge required. The most important caregiver knowledges contain four occupation-specific knowledges: *biology*, *chemistry*, *medicine and dentistry*, and *therapy and counseling*. The most important knowledges listed for competing occupations contains knowledges of general application only.

EXHIBIT 5.3 – Comparison of Level of Knowledge Required by Caregiver and Competing Occupations for the 10 Most Important Areas of Knowledge for Caregiver Occupations



Source: Trefoil, *Occupational Viewer 2000* with O*NET in it

EXHIBIT 5.4 – Comparison of Level of Knowledge Required by Caregiver and Competing Occupations for the 10 Most Important Areas of Knowledge for Competing Occupations



Source: Trefoil *Occupational Viewer 2000* with O*NET in it

Much of the occupation-specific knowledge for caregivers would be acquired in classrooms or on-the-job training. *Customer and Personal Service* knowledge often is derived from an individual's socialization experiences in growing up as much as from classroom training. Knowledge definitions, standard scale, and benchmark labels may be found in Appendix D.

Abilities

Abilities are fairly constant traits that determine an individual's potential for performing a range of assorted tasks. Possession of underlying abilities determines the degree to which one can learn new skills and tasks. For example, to develop the skill of piloting an airplane, one must have the underlying abilities of *spatial orientation* and *multi-limb coordination*.[5]

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Abilities
(continued)

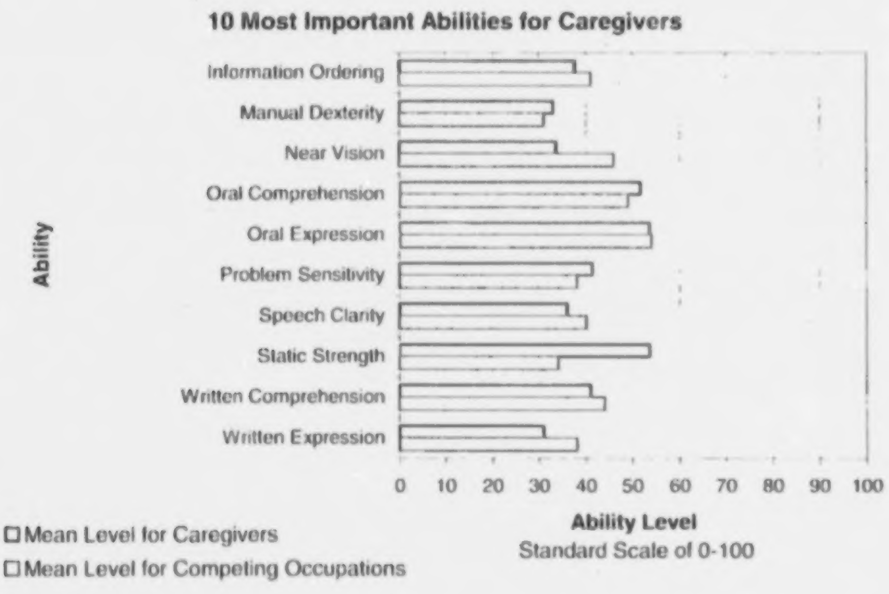
O*NET classifies abilities into four types:[6]

- Cognitive abilities
- Psychomotor abilities
- Physical abilities
- Sensory abilities

The distribution of the ten most important abilities amongst the ability categories is similar for caregiver and competing occupations. The similar distribution of abilities important to caregiver and competing occupations between the ability types means the emphasis on cognitive, psychomotor, physical, or sensory abilities would not differ noticeably from one occupation to the next.

Ability levels required for caregiver and competing occupations are fairly close with one exception: *static strength*. Caregiver occupations require significantly more ability in static strength than the competing occupations.

EXHIBIT 5.5 - Comparison of the Ability Level in Caregiver and Competing Occupations for the 10 Most Important Abilities for Caregiver Occupations.

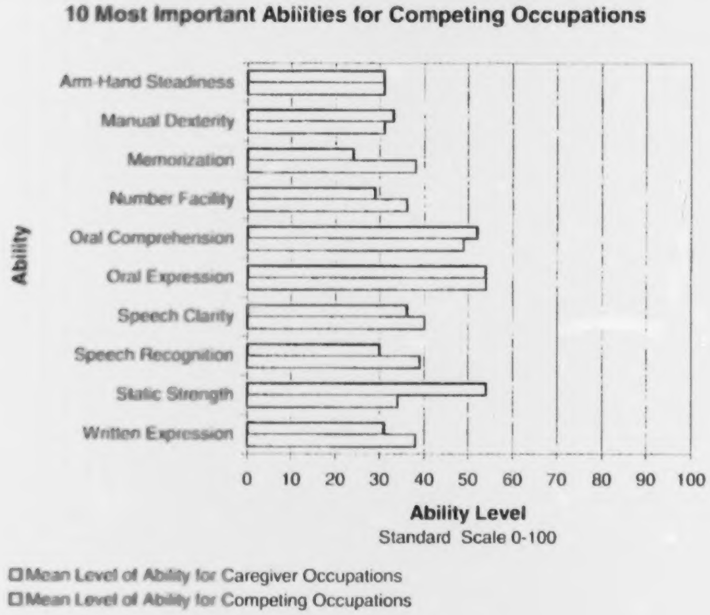


Source: Trefoil *Occupational Viewer 2000* with O*NET in it

Abilities
(continued)

Six abilities are common to both caregiver and competing occupations' lists of the ten most important abilities: *Manual dexterity, oral comprehension, oral expression, speech clarity, static strength*, and *written expression*. All abilities are in the moderate range on the standard scale. Ability definitions, standard scale, and benchmark labels may be found in Appendix D.

EXHIBIT 5.6 – Comparison of the Ability Level in Caregiver and Competing Occupations for the 10 Most Important Abilities for Competing Occupations



Source: Trefoil *Occupational Viewer 2000* with O*NET in it

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Implications for recruitment and retention

Looking at the SKAs needed to successfully learn and perform the tasks for caregiver and competing occupations, several facts stand out:

- There are more similarities than differences in SKAs
- Caregivers require more knowledge acquired through a combination of education and on-the-job training
- Caregivers require significantly more static strength ability
- Caregivers require more knowledge about handling customers

Recruitment efforts need to both attract qualified applicants and catch the attention of applicants who will stay. To accomplish this, recruiters need to address:

Public Contact Experience – Applicants with previous public contact experience, paid or volunteer, will have a better understanding of what serving people is like. Applicants who accept caregiver positions without prior customer or personal service experience have little idea of the stresses of that kind of work, whether they have the personal qualities to handle it, or if they would get satisfaction from the work.

Static Strength – Realistic assessment of applicants compared to the strength requirements of caregiver jobs—both level of strength and frequency of needing to use—should be part of applicant assessment and selection process. Inappropriate matches will result in worker injury, lost productivity, higher insurance rate, and higher turnover. All of these are costly outcomes for employers of an inappropriate match between worker and job.

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[1] *In Search of Skills Standards for 2000 & Beyond*, Employment Development Department, Labor Market Information Division, February 1996.

[2] Ibid.

[3] Richard N. Bolles, *What Color Is Your Parachute?*, Ten Speed Press, Berkeley, CA, 2000.

[4] Edwin A. Fleishman et al, "Knowledges" in Norman J. Peterson et al Volume I: Report, *Development of Prototype Occupational Information Network (O*NET) Content Model*, Utah Department of Employment Security, 1995, p. 4-1.

[5] Fleishman, op.cit., p. 10-2.

[6] Fleishman, op.cit., p. 10-8.

Training, Licensing & Certification

Training levels

The caregiver occupations face the difficult challenge of competing with numerous entry-level occupations with similar or higher wages that do not require classroom training or certification prior to entry into employment. In contrast, the caregiver occupations require classroom training, supervised clinical training and certification or licensure from the California Department of Health Services.

The training, licensing and certification requirements for entry-level occupations competing with the caregiver occupations vary significantly.

The competing occupations were compared against the Bureau of Labor Statistics (BLS) training levels, a classification system that provides a national measurement of how much training or experience an occupation requires for most workers to become proficient. BLS has identified 11 training levels ranging from short-term on the job training (level 11), to first professional degree (level 1), for a physician. See *Appendix B* for more details on each of the training levels.

While the BLS training level is useful as a general indicator, it does not address the state of California's specific licensing or certification requirements for certain occupations.

Training requirements for caregiver occupations

Caregiver occupations have more pre-employment requirements than competing entry level occupations.

In Home Health Supportive Services (IHSS) - According to the Department of Social Services, IHSS workers must meet the following qualifications:

- Be at least 18 years of age, or obtain a work permit if under 18.
- Fingerprint criminal background check is not required though some counties request a background check.
- Formal training is not required; however, some counties offer voluntary basic caregiver training. The patient or the patient's family trains the IHSS caregiver. As the employer, the patient is responsible for hiring, training, supervising, and firing decisions.

Personal and Home Care Aides - Training requirements vary from state to state. In some states, including California, no formal training is required.

Training requirements for caregiver occupations (continued)

Home Health Aides - Certification by the Department of Health Services requires:

- Applicant must be at least 16 years of age
- Health screening and TB test
- Completion of 120 hours of home health aide training in a program approved by Department of Health Services
- Criminal background check
- A passing score on a final exam administered by the training program[1]

Nursing Aides, Orderlies and Attendants - Certification by the Department of Health Services requires:

- Applicant must be at least 16 years of age
- Health screening and TB test
- Completion of a minimum of 150 hours of nurse assistant training in a program approved by the Department of Health Services
- Applicants must successfully pass a nurse assistant certification and competency exam after completing a state-approved program
- Criminal background check[2]

Training requirements for competing occupations

No prerequisite training requirements

Eleven of the nineteen competing occupations (58 percent) do not require a license, certificate or classroom training:

- Adjustment Clerks (Customer Service Representatives)
- Cashiers
- Combined Food Preparation and Service Workers
- Counter Clerks & Rental Clerks
- Fitness Trainers & Aerobics Instructors
- Food Preparation Workers
- General Office Clerks
- Receptionists & Information Clerks
- Retail Salespersons
- Shipping, Receiving, & Traffic Clerks
- Waiters and Waitresses

Training requirements for competing occupations (continued)

Fingerprinting and on-the-job training required

The following competing occupations require fingerprinting and on-the-job training:

- Correctional Officers & Jailers
- Social & Human Service Assistants
- Teacher Assistants

License, certificate or classroom training required

The following competing occupations require a California state license, certificate or classroom training:

- Child Care Workers
- Dental Assistants
- Emergency Medical Technicians and Paramedics
- Security Guards
- Medical Assistants

Implications for recruitment and retention

Potential caregivers may like the idea of work where they nurture and contribute to the well being of other people but may be intimidated by the classroom training and testing involved for certification if they were not good students in school. They may think, "Why experience all that anxiety when there are other jobs that pay just as much or better without going to school?"

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[1] California Trade and Commerce Agency and Employment Development Department, *California's Professional & Business License Handbook*, August 1999, p. 161.

[2] Ibid., p. 163.

Wages – Caregivers vs. the Competition

Wage data

Wages for entry caregiver occupations vary depending on geographic location, health care setting, and level of experience. Wage data below represent 1999 employer wage reports collected by the California Occupational Employment Statistics (OES) Survey under the direction of the U.S. Department of Labor. Information for in-home supportive services (IHSS) workers was supplied by the California Department of Social Services.

Nurse aide wages, including certified nursing assistants

The beginning average wage for nurse aides in California is $7.23 per hour. Average hourly earnings for all experience levels of these workers is $8.78. High wages (75th percentile) reported for the occupation averaged $9.95 per hour. Several counties are listed along with the statewide data in the table below to illustrate variances that occur as population density and economics change.

Data suggest that wages paid by long-term care facilities are much lower for nurse aides than those paid by hospitals in California. A 1996 Office of Statewide Health Planning (OSHPD) study showed nurse aides in skilled nursing facilities earn 67 percent of what their counterparts make in hospitals.[1]

Home health aide wages

Home health aides earn, on average, $9.73 per hour in California. Wage ranges from entry to high earnings are broader for these workers than either nurse aides or personal and home care aides. The average entry wage in California for home health aides is reported at $7.15 per hour, with the statewide average for high earners (75th percentile) at $11.29 per hour. Large metropolitan areas such as San Francisco and Sacramento report average high earnings of $15.13 and $13.09, respectively; however, in rural areas such as Shasta County high earnings are significantly lower at $8.11 per hour. Of note is the Los Angeles metropolitan area, which shows high earnings average of $9.32, significantly lower than the statewide average.

Personal and home care aides, including IHSS workers

Average wages for personal and home care aides range from $6.61 per hour for new workers to $9.29 at the high-end earnings level. However, wages for the 230,000-plus in-home support services (IHSS) workers are not included in this survey. Their wages vary according to geographic location and type of provider. Those paid directly by individuals generally earn minimum wage ($6.25 per hour as of Jan. 1, 2001), but some earn as much as $7.25 per hour. IHSS workers paid by public authorities earn from minimum wage to $9.70 per hour. Third party contractors pay IHSS workers between $5.89 and $9.70 per hour.[2]

EXHIBIT 7.1 – Average Hourly Wages Earned by Selected Caregivers in 1999

Caregiver job title and geographic area	25th Percentile	Average wage, all levels	Top 75th percentile
Nurse aides, Statewide	**$7.23**	**$ 8.78**	**$ 9.95**
San Francisco Area	$9.10	$10.43	$12.65
Los Angeles Area	$6.95	$ 8.21	$ 9.66
Sacramento Area	$7.54	$ 8.99	$10.03
Fresno and Madera Cos.	$6.76	$ 7.50	$ 8.39
Riverside/San Bern. County	$6.81	$ 7.99	$ 9.00
Redding Area (Shasta Co.)	$6.84	$ 7.61	$ 8.58
Home health aides, Statewide	**$7.15**	**$ 9.73**	**$11.29**
San Francisco Area	$9.24	$12.07	$15.13
Los Angeles Area	$7.37	$ 9.32	$10.80
Sacramento Area	$7.40	$10.27	$13.09
Fresno and Madera Cos.	$6.24	$ 8.00	$ 8.76
Riverside/San Bern. County	$6.45	$ 8.30	$ 9.73
Redding Area (Shasta Co.)	$7.08	$ 7.85	$ 8.16
Personal & home care aides, Statewide[3]	**$6.61**	**$8.23**	**$ 9.29**
San Francisco Area	$6.77	$8.34	$ 9.75
Los Angeles Area	$6.80	$8.81	$10.95
Sacramento Area	$6.79	$8.16	$ 8.75
Fresno and Madera Cos.	$6.81	$7.80	$ 8.35
Riverside/San Bern. County	$6.53	$7.63	$ 8.44
Redding Area (Shasta Co.)	$6.42	$7.96	$ 9.10

Source: California Employment Development Department/Labor Market Information Division, Occupational Employment Statistics (OES) Survey, 1999

Federal poverty guidelines, caregiver occupations, and the competition

The 2000 federal poverty guidelines issued by the *U.S. Department* of Health and Human Services are used to determine whether an individual's or family's income would make them eligible for subsidy payments. These guidelines determine a family's eligibility for assistance such as food stamps, Head Start childcare assistance, and the National School Lunch Program.

While it is commonly accepted that the cost of living in the state of California is higher than most other states, the federal poverty guidelines in 2000 are as follows:

Size of Family Unit	Federal Poverty Guideline
1	$ 8,350
2	$11,250
3	$14,150
4	$17,050

In California, entry-level earnings for nurse aides, home health and personal and home care aides on average fall under this federal poverty level. In fact, in many areas of California the average wage for *experienced* caregiver aides falls below this guideline for workers who have dependents.

A 2000 study by the Institute of Health and Policy Studies estimates that 9 percent of California workers live in a household whose total annual income is less than 125% of the federal poverty level.[4]

Lower living income level

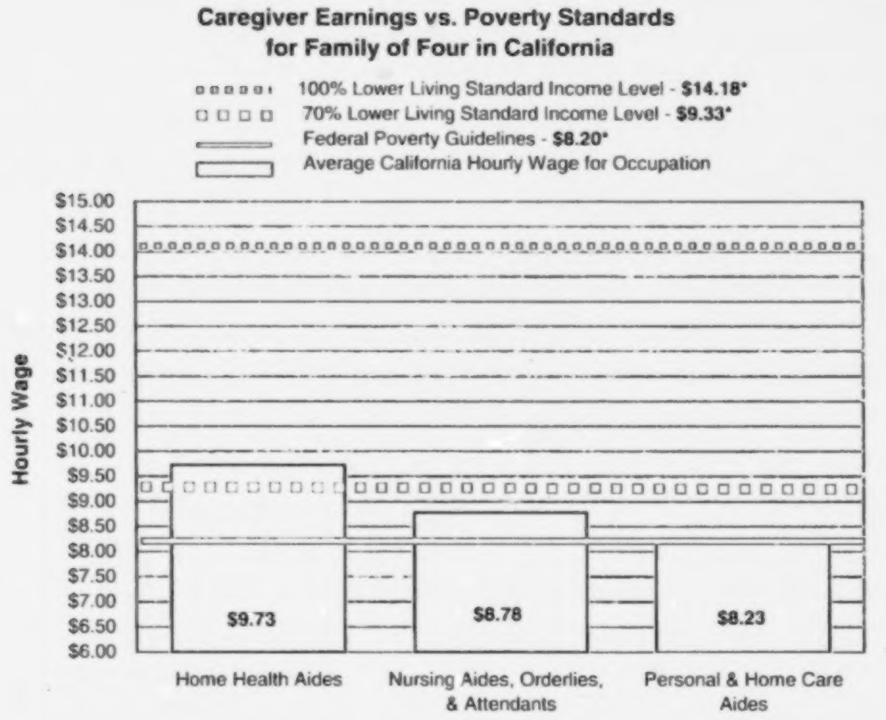
The Lower Living Standard Income Level (LLSIL) is determined by the U.S. Department of Labor and establishes five Local Workforce Investment Areas in the state. Income criteria vary for each area.

70% Lower Living Standard Income Level - Applicants must earn less than 70 percent of the LLSIL to qualify for economically disadvantaged status and receive certain services under the Workforce Investment Act (WIA) Title I programs. Income for a four-person family in California ranges from $9.58 per hour in counties such as Humboldt, Imperial, and Mendocino, to $10.42 per hour for higher-cost areas such as San Francisco, Marin, and Alameda counties. Under these guidelines, nurse aides and personal home care aides who earn average wages and who are sole supporters of a four-person family all would qualify for economically disadvantaged status. Home health aide average earnings come in just above this level at $9.73 per hour.

Lower living income level (continued)

100% Lower Living Standard Income Level - The 100 percent LLSIL is the level the U.S. Department of Labor considers the *minimum* earning level for self-sufficiency. The 100 percent LLSIL for a family of four in California ranges from $13.68 per hour (Humboldt, Imperial, and Mendocino counties) to $14.89 per hour (San Francisco, Marin, and Alameda counties).

EXHIBIT 7.2 – Poverty Guidelines Compared to Caregiver Average Earnings



*For comparison purposes, annual wages in the Federal Poverty Guidelines and the Lower Living Standard Income Level were converted to hourly wages. The five Local Workforce Investment Area incomes were averaged to determine a statewide income. See the Workforce Investment Act Directive[5] for geographic-specific income information.

Sources: California Employment Development Department, Labor Market Information Division, Occupational Employment Statistics (OES) Survey, 1999; U.S. Department of Health and Human Services federal poverty guidelines; and U.S. Department of Labor Lower Living Standard Income Level 2000

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EXHIBIT 7.3 – Competing Occupation Entry Wages Compared to Federal Poverty Guideline ($8.20/hr.)[6]

👎 Entry workers who earn **below** federal poverty guideline	👍 Entry workers who earn **above** federal poverty guideline
○ Waiters & waitresses	○ Emergency medical technicians & paramedics
○ Combined food preparation & service workers	○ General office clerks
○ Cashiers	○ Social and human service assistants
○ Counter clerks & rental clerks	○ Medical assistants
○ Retail salespersons	○ Fitness trainers and aerobics instructors
○ Food preparation workers	○ Adjustment clerks (Cust. service rep.)
○ **Personal & home care aides**	○ Dental assistants
○ Child care workers	○ Correctional officers & jailers
○ Security guards	
○ **Home health aides**	
○ **Nursing aides, orderlies & attendants**	
○ Shipping, receiving & traffic clerks	
○ Teacher assistants	
○ Receptionists & information clerks	

Source: U.S. Department of Health and Human Services, Feb. 2000

What the competition earns: More

Wage comparisons between the selected caregiver occupations and their competing occupations are illustrated in Exhibit 7.4.

Data show that salaries for occupations competing for the entry labor pool vary, in some cases dramatically. Included are statewide average hourly salaries, average entry wage, and average high earnings (75th percentile) paid to workers in California.

The data show that, compared with large growth occupations that require similar lengths of training, entry caregivers can expect to earn less than most. Wages for the three caregiver aide occupations fall into the 35-45th percentile of the group.

EXHIBIT 7.4 – Average Wages for Caregiver and Competing Occupations

Caregivers Versus the Competition In California	25th Percentile	Average Wage	75th Percentile
Correctional officers and jailers	$18.27	$21.06	$24.75
Dental assistants	$10.63	$13.40	$15.91
Adjustment clerks (Customer service representatives)	$10.41	$14.20	$17.59
Fitness trainers and aerobics instructors	$10.15	$17.73	$24.08
Medical assistants	$10.00	$12.73	$15.11
Social and human service assistants	$ 9.40	$12.64	$14.94
General office clerks	$ 8.64	$11.31	$13.40
Emergency medical technicians & paramedics	$ 8.24	$12.99	$16.28
Receptionists and information clerk	$ 8.05	$10.43	$12.06
Teacher assistants	$ 7.94	$ 9.85	$11.39
Shipping, receiving, and traffic clerks	$ 7.83	$10.72	$12.78
NURSING AIDES, ORDERLIES, & ATTENDANTS	**$ 7.23**	**$ 8.78**	**$ 9.95**
HOME HEALTH AIDES	**$ 7.15**	**$ 9.73**	**$11.29**
Security guards	$ 6.78	$ 8.68	$ 9.40
Child care workers	$ 6.70	$ 8.38	$ 9.53
PERSONAL & HOME CARE AIDES	**$ 6.61**	**$ 8.23**	**$ 9.29**
Food preparation workers	$ 6.54	$ 7.90	$ 8.79
Retail salespersons	$ 6.50	$ 9.69	$10.47
Counter and rental clerks	$ 6.33	$ 8.58	$ 9.62
Cashiers	$ 6.27	$ 8.76	$ 9.50
Combined food preparation and service workers	$ 6.07	$ 7.20	$ 7.68
Waiters and waitresses	$ 6.04	$ 6.90	$ 6.82

Source: California Employment Development Department/Labor Market Information Division, Occupational Employment Statistics (OES) Survey, 1999

Chance to earn more with experience? Not for many caregivers

How much opportunity is there for entry caregivers to earn more as they remain on the job? Not much, it turns out.

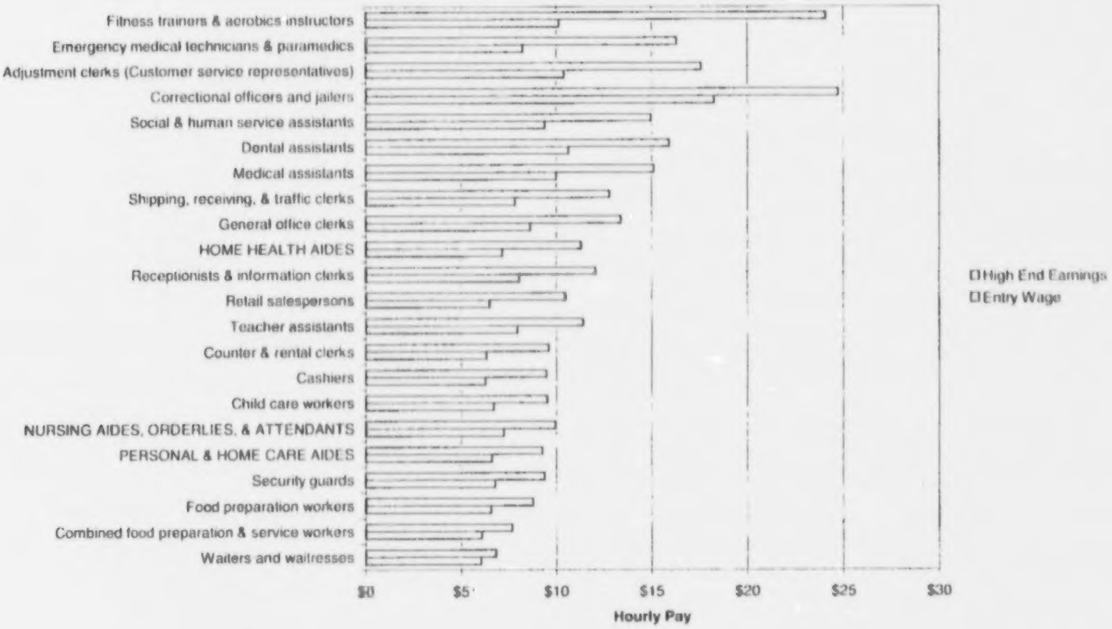
Looking at competing occupations, fitness trainers and emergency medical technicians and paramedics enjoy the broadest range between entry and high earnings. Fitness trainers earn an average $13.93 more per hour from the time they start work to high end earnings, and EMTs and paramedics enjoy an average $8.04 more per hour with experience and seniority.

By comparison, nurse aides and personal and home care aides can expect to earn $2.61 and $2.68 more per hour, respectively, over time within their occupation. This does not include IHSS workers in California who generally earn minimum wage.[7]

Home health aides can expect to earn an average $4.85 more per hour between entry and high end wages while on the job.

EXHIBIT 7.5 – How Much Can Earnings Grow?

Occupations Ranked by Wage Range—the Difference Between Entry and High End Wages



Source: California Employment Development Department/Labor Market Information Division, Occupational Employment Statistics (OES) Survey, 1999

Implications for recruitment and retention

The difference between wages earned by caregiver aides and those offered for competing jobs in the labor market is substantial in many cases. Moreover, the opportunities to earn more each year for caregivers who stay on the job appears limited.

This gap, paired with the higher responsibilities required for caregivers, may be one reason for the high turnover rate among these workers, and leads one to speculate that longstanding caregivers stay for reasons other than earnings.

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[1] *The Hidden Health Care Workforce: Recognizing, Understanding and Improving the Allied and Auxiliary Workforce,* The Center for Health Professions, University of California, San Francisco. July, 1999; p. 86.

[2] California Department of Social Services, 1999 data.

[3] Does not include In-Home Supportive Services (IHSS) workers.

[4] California Work and Health Survey, Institute of Health and Policy Studies, University of California at San Francisco; 2000.
Retrieved from: http://medicine.ucsf.edu/programs/cwhs/2000/tocday1.html

[5] Employment Development Department, Workforce Investment Division, Workforce Investment Act Directive No. WIAD99-1, June 26, 2000.

[5] Based on 25th Quartile average statewide wage as reported in the California Employment Development Department/Labor Market Information Division, Occupational Employment Statistics (OES) Survey, 1999.
Retrieved from: http://medicine.ucsf.edu/programs/cwhs/1999/dayone/report.html

[7] U.S. Department of Health and Human Services, March 2000.

Benefits and Hours

Caregiver benefits

Attractive benefit packages can serve to offset low wages or lack of advancement opportunities. The availability of benefit packages for caregivers varies widely. There is a great difference in pay level and benefits between hospitals and private skilled nursing facilities. Government sponsored and large privately run hospitals are the most likely employers to offer benefits.

While full-time caregivers are more likely to receive benefits than part-time caregivers, studies indicate that on a nationwide basis caregiver employers, particularly long-term care facilities and home health agencies, very often do not offer medical benefits.

When medical plans are available, caregivers frequently cannot afford to pay the costly premiums. A 1996 survey of 324 long-term care facilities in California showed that, on average, CNAs are required to pay 40.8 percent of the premium for medical coverage for themselves and their family.[1] The average CNA wage at that time was $6.92 an hour, or approximately $1200 a month gross, for a full-time employee. Employee monthly contributions for medical insurance ranged from $60 to $69 a month for themselves and as high as $327 a month to cover a family.[2]

Faced with this added monthly deduction to an already relatively low paycheck, many CNAs are unable to participate. Additionally, most of the surveyed employers indicated a 30-hour per week minimum workweek for an employee to be eligible for benefits.

Employer surveys

Each year the EDD's Labor Market Information Division (LMID), in cooperation with local partners, administers confidential employer surveys to gather occupational data and publish annual occupational outlook reports.[3] These surveys detailed in *Appendix C* suggest that on the average 65% of all competing occupations offer medical insurance compared to:

- 44% of Personal and Home Care Aides
- 54% of Home Health Aides
- 77% of Nurse Aides and Orderlies

On the average 57% of all the competing occupations offer sick leave benefits compared to:

- 40% of Personal and Home Care Aides
- 46% of Home Health Aides
- 69% of Nurse Aides and Orderlies

Employer surveys
(continued)

The data suggests that nursing aides and orderlies are more likely to receive benefit packages than Home Health Aides or Personal and Home Care Aides. However, the figures in *Appendix C* may appear higher than actual practice because hospitals and government facilities with larger human resource departments may have been more likely to respond to the employer surveys than smaller facilities.

Comparison

Many of the competing occupations receive benefit packages including medical insurance more frequently than the entry-level Caregiver occupations.[4]

A higher percentage of employers for the following competing occupations offer health insurance benefits than employers for Personal and Home Care Aides, and Home Health Aides:

- Correctional Officers & Jailers
- Dental Assistants
- Emergency Medical Technician
- Social & Human Service Assistants
- General Office Clerks
- Adjustment Clerks (Customer service representatives)
- Medical Assistants
- Retail Salespersons
- Cashiers
- Teacher Assistants
- Child Care Workers
- Receptionists & Information Clerks
- Shipping, Receiving, & Traffic Clerks
- Combined Food Preparation and Service Workers

IHSS In-home supportive services

Generally, individual Home Health Aides employed through the IHSS program throughout the state earn minimum wage and do not receive benefits.

By statute, (Welfare and Institution code section 12302.2) the IHSS program pays for workers compensation, state disability insurance (SDI), social security (FICA), and unemployment insurance. Counties using public authority and contract service providers may offer medical insurance.

The following IHSS providers may elect to participate in State Disability Insurance (SDI), a program funded by employee paid premiums:

- Parents caring for a child
- Spouse caring for another spouse
- Non relatives (if their earnings are a minimum of $750 per quarter)

IHSS In-home supportive services (continued)

Additionally, qualifying individual providers may contribute to social security (FICA):

- A child over 21 years of age caring for a parent
- Any non relative

Hours

Occupational work hours may serve to attract or repel potential job applicants as individual employment needs vary greatly. For instance, students, parents with young children, or family caregivers may prefer to work part-time, while those who are "head of household" may need to work full time to support their families. Work hours that may be highly prized by one individual may not be practical for the lifestyle of another.

Full-time/ part-time

The majority of occupations that compete with caregiver occupations offer opportunities for both full-time and part-time employment hours. For example, salespersons, cashiers, receptionists and teacher's aide positions all offer both full-time and part-time hours to accommodate employee preference and business needs.

Work days: Monday through Friday/ weekends

Caregiver occupations offer work shifts Monday through Friday and may require working weekends and holidays, as many patients require 24-hour care. Some of the competing occupations also require weekend and holiday shifts: cashiers, correctional officers, waiter/waitresses, and retail salespersons to mention a few. Weekend work is common for some occupations and may appeal to college students or individuals with dependents, to allow time for school attendance or child care/adult care during the weekday. Therefore, weekend and holiday work shifts may be considered advantageous depending upon personal need.

Shift

Caregiver occupations offer a variety of shifts: days, evenings, and graveyard shifts are all available since many patients require around the clock care. Although graveyard shifts have a limited appeal, the caregiver occupations offer shift flexibility which may attract students or parents pursuing shifts to work around the demands of their personal lives.

Flextime

Flextime scheduling generally entails working nine or ten hour days to obtain one day off every week or every other week. Normally, only large organizations offer flextime arrangements. Very little data is available on flextime opportunities for either the caregiver or competing occupations.

Implications for recruitment and retention

Affordable medical coverage is an important incentive to attract and retain workers. However, some individuals may not be concerned about the lack of affordable medical benefits:

- Persons covered by their spouses' health plans
- Retirees with benefits looking for a second career
- Full-time students who have a school health plan

Targeted marketing could turn the realities of shift and weekend work from a liability in the eyes of many to an asset. Some segments of the population might prefer working swing or graveyard shifts and/or weekend shifts:

- Students
- Two-parent families committed to raising their children with one parent always at home with the children
- People who need to support themselves but also want their days free for other activities important to them

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[1] California Assoc. of Homes and Services for the Aging and the California Assoc. of Health Facilities, 1996, quoted by The Center for the Health Professions, "The Hidden Health Care Workforce," UCSF, San Francisco, July 1999, p. 70.

[2] The Center for the Health Professions, *op cit*, p. 126-127.

[3] Employment Development Department/Labor Market Information Division, California Cooperative Occupational Information System.

[4] Ibid.

Physical Requirements

Physical requirements

Physical demands differ extensively from occupation to occupation. While some occupations are sedentary, others are physically demanding, requiring twisting, bending and heavy lifting. What one individual may consider as light physical activity may be highly exerting or injurious to another. It is important for job seekers to consider their physical abilities and limitations as well as their skills and personal interests when exploring potential occupations in order to achieve a satisfying job match.

The Occupational Information Network (O*NET) provides the details, definitions, degree of importance, and level of ability required for physical abilities.[1] *Appendix D* contains detailed comparisons of the level of physical abilities important to caregiver and competing occupations.

Trunk strength

O*NET defines trunk strength as the ability to use the abdominal and lower back muscles to support part of the body continuously over time without fatiguing. For the caregiver occupations, trunk strength is most important to nursing aides, orderlies and attendants. This physical ability is also important to the following competing occupations: fitness trainers and aerobic instructors; food preparation workers; guards and watch guards; medical assistants; shipping, receiving, and traffic clerks; and waiters and waitresses.

Extent flexibility

Extent flexibility is the ability to bend, stretch, twist, or reach out with the body, arms, or legs. Extent flexibility is an important physical trait for nursing aides, orderlies, and attendants. Of the competing occupations, extent flexibility is also important to athletic trainers, guards and watch guards, medical assistants, waiters and waitresses.

Static strength

Static strength is defined as the ability to exert maximum muscle force to lift, push, pull, or carry objects. This attribute is extremely important for nursing aides, orderlies, and attendants. They require a higher level of static strength than any other competing or caregiver occupations.

Stamina

Stamina is the ability to exert one's self physically over long periods of time without getting winded or out of breath. Stamina is somewhat important to home health aides and nursing aides, orderlies, and attendants. In comparison, stamina is important to the following competing occupations: fitness trainers and aerobic instructors, correctional officers and jailers, guards and watch guards, and waiters and waitresses.

Explosive strength

Explosive strength is the ability to use short bursts of muscle force to propel oneself (as in jumping or sprinting), or to throw an object. Explosive strength is of very little importance to the caregiver occupations. However, explosive strength is important to several of the competing occupations: correctional officers and jailers and guards and watch guards.

Comparison

EXHIBIT 9.1 – Level of Physical Abilities

	Extent Value Scale 1 to 100				
	Trunk Strength	Extent Flexibility	Static Strength	Stamina	Explosive Strength
Caregiver Occupations					
Nursing Aides, Orderlies, & Attendants	45	48	79	21	21
Personal & Home Care Aides	20	20	31	9	3
Home Health Aides	29	23	51	23	9
Mean for Caregiver Occupations	**31**	**30**	**54**	**18**	**11**
Mean for Competing Occupations	**35**	**34**	**35**	**22**	**20**

Source: Department of Labor, *Occupational Information Network* (O*NET)

Implications for recruitment and retention

The strength requirements for caregiver occupations should be an important consideration in the hiring process to ensure the applicants not only have the strength required, but are able to sustain the strength over the workday.

Employee training in proper lifting techniques as well as use of assistive devices could help retain employees by preventing injuries.

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[1] Department of Labor, O*NET (Occupational Information Network), 1998. O*NET contains over 450 standardized descriptors of skills, abilities, interests, values, knowledge, and work content.

Values: The Key to Job Satisfaction

Work values

Job satisfaction is directly related to the degree to which a person's values and corresponding needs are satisfied by his or her work environment.

People repeatedly accept job offers with little or no consideration as to whether the job satisfies any of their needs beyond wages and benefits. Many people are neither consciously aware of their needs nor realize that occupational choice could offer a means to fulfill some of those needs. Individuals may by chance land in an occupation that satisfies them or they may never find satisfaction in their job choices.

Assessing values

Individual values are formed when young and alter over time in response to changing life experiences. Individuals vary significantly in the importance to them of these needs and values.

Each need and value is on a continuum that could be charted with these indicators of a value's importance to an individual:

- "not very important"
- "on the fence about"
- "give lip service to"
- "take action accordingly"

An abundance of work values assessment tools and exercises exist to make individuals mindful of their own values and the role values play in making a satisfying occupational choice. Some of these tools are administered and interpreted by a counselor; others are self-administered. Despite the availability of assessment tools, values are an often disregarded aspect of making a career or job choice.

Satisfiers and dissatisfiers

Elimination of dissatisfying characteristics from a job would not automatically make the job satisfying according to the Motivation-hygiene Theory developed by Frederick Herzberg.[1] Herzberg's theory is based on the idea that the opposite of dissatisfaction is not satisfaction. His theory has been a strong influence on job design since the late 1950s.

Satisfiers and dissatisfiers
(continued)

Herzberg's theory espouses two types of work values: (1) Job context (hygiene factors) cause or prevent dissatisfaction by their absence or sufficiency; and (2) motivating factors associated with job content increase job satisfaction. Examples of both factors are listed below:

Job Context

- Supervision
- Company policy
- Salary
- Working Conditions
- Security

Motivation Factors

- Achievement
- Recognition
- Responsibility
- Advancement

Needs and values

Until recent years, even those job seekers savvy about their own values were largely left to their own devices in determining which occupations offered the best possibilities for satisfying those values. Work values and occupational research existed but was not easily accessed.

Computer databases make it possible to link work values with other occupational information. O*NET[2] as well as commercial assessment products now deliver work values information to the users' fingertips.

Six values and their twenty-one corresponding needs are described in detail in Exhibit 10.1. Each occupation in O*NET was assessed by occupational analysts using the following scale measuring the extent to which the value or need is characteristic of the occupation:

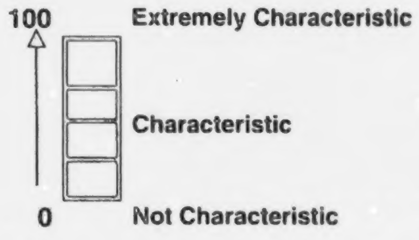
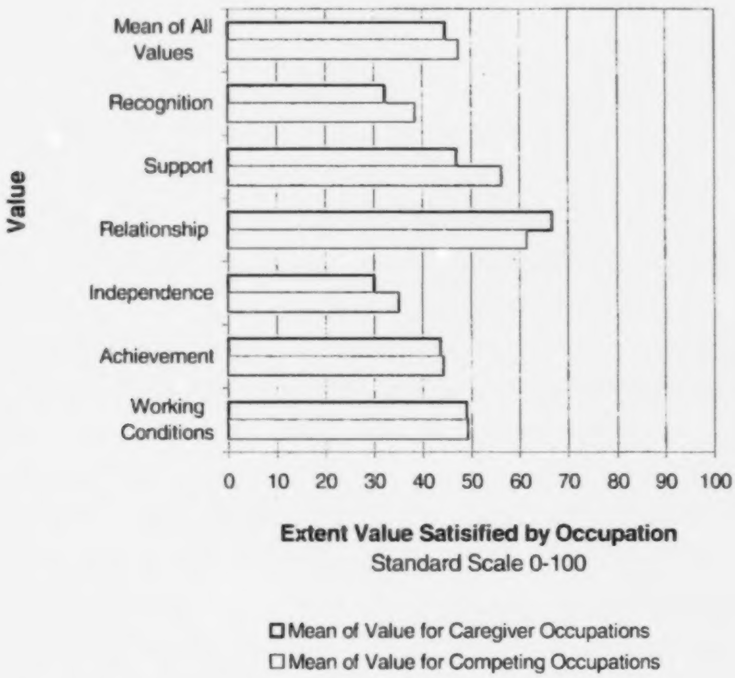


EXHIBIT 10.1 – Values and Corresponding Needs[3]

Standardized Work Values	Corresponding Needs
RELATIONSHIPS Occupations that satisfy this work value allow employees to provide service to others and work with co-workers in a friendly non-competitive environment.	○ Social Service Workers on this job have work where they do things for other people ○ Moral Values Workers on this job are never pressured to do things that go against their sense of right and wrong ○ Co-workers Workers on this job have co-workers who are easy to get along with
SUPPORT Occupations that satisfy this work value offer supportive management that stands behind employees.	○ Supervision, Human Relations Workers on this job have supervisors who back up their workers with management ○ Company Policies and Practices Workers on this job are treated fairly by the company ○ Supervision, Technical Workers on this job have supervisors who train their workers well
WORKING CONDITIONS Occupations that satisfy this work value offer job security and good working conditions.	○ Security Workers on this job have steady employment ○ Activity Workers on this job are busy all the time ○ Variety Workers on this job have something different to do every day ○ Independence Workers on this job do their work alone ○ Working Conditions Workers on this job have good working conditions ○ Compensation Workers on this job are paid well in comparison with other workers
ACHIEVEMENT Occupations that satisfy this work value are results oriented and allow employees to use their strongest abilities, giving them a feeling of accomplishment.	○ Achievement Workers on this job get a feeling of accomplishment ○ Ability Utilization Workers on this job make use of their individual abilities
RECOGNITION Occupations that satisfy this work value offer advancement, potential for leadership, and are often considered prestigious.	○ Social Status Workers on this job are looked up to by others in their company and their community ○ Advancement Workers on this job have opportunities for advancement ○ Authority Workers on this job give directions and instructions to others ○ Recognition Workers on this job receive recognition for the work they do
INDEPENDENCE Occupations that satisfy this work value allow employees to work on their own and make decisions.	○ Autonomy Workers on this job plan their work with little supervision ○ Creativity Workers on this job try out their own ideas ○ Responsibility Workers on this job make decisions on their own

Satisfaction

EXHIBIT – 10.2 Comparison of Mean Values for Caregivers and Competing Occupations



Source: Trefoil, *Occupational Viewer 2000* with O*NET in it

"Can't get no satisfaction" by the Rolling Stones could be a theme song for both the caregiver and competing occupations as the Mean of All Values for both groups of occupations register below the 50 point mark on the 100 point scale in Exhibit 10.2. The Relationships work value has the highest potential for realization in both the caregiver and competing occupations. Detailed value and needs scales can be found in *Appendix D.* Sections 11 through 17 examine each value as it plays out in caregiver and competing occupations.

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[1] Frank J. Landy and Don A. Trumbo, *Psychology of Work Behavior*, The Dorsey Press, Homewood, IL, 1976, p. 301-303, 330-331.

[2] Department of Labor, *O*NET (Occupational Information Network)*, 1999. Retrieved from: http://online.onetcenter.org

[3] Ibid.

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VALUES: Relationships

Relationships

Occupations that satisfy the Relationships value allow employees to provide service to others and work with co-workers in a friendly non-competitive environment.

Corresponding needs

Three corresponding needs feed into the Relationships value:

- Social Service Workers do things for other people.
- Moral Values Workers are never pressured to do things that go against their sense of right and wrong.
- Co-workers Workers have co-workers who are easy to get along with.

Satisfying the Relationship value in caregiver occupations

Caregiver occupations appear ideal for satisfying all three needs that make up the Relationships value. Caregivers help people as part of a team effort to deliver health care services.

Potential values conflict

Individuals with a high Relationships value could experience values conflict in caregiver occupations under several circumstances:

- The comparatively low wages of caregiver occupations could conflict with workers' needs to provide for their families. Those with high Relationships values could be drawn to caregiver occupations, but a sense of duty to their family's welfare could prevail over the lure of caregiver occupations.
- In some caregiver situations, workers might feel that conditions such as staff-to-patient ratios prevent them from delivering the quality of care their moral values dictate as necessary. In such circumstances, workers might seek other types of employment or other employers to relieve their frustration at not being able to provide quality care.

Comparison

EXHIBIT 11.1 – Extent to Which Occupation Satisfies Relationships Value

Caregiver Occupations	**Extent Value Scale 1 to 100**
Nursing Aides, Orderlies, & Attendants	75
Personal & Home Care Aides	64
Home Health Aides	61
Mean for Competing Occupations	61

Source: Trefoil, *Occupational Viewer 2000* with O*NET in it

Comparison
(continued)

Among the competing occupations, only emergency medical technicians offers more opportunity for satisfying the Relationships value than nursing aides, orderlies, and attendants.

Seven of the competing occupations, however, come as close or closer to satisfying the Relationships value than do home health aides and personal and home care aides:

Fitness Trainers and Aerobic Instructors	66
Child Care Workers	70
Dental Assistants	67
Human Service Workers	61
Medical Assistants	69
Teacher Aides & Clerical Assistants	67
Waiters & Waitresses	68

Implications for recruitment and retention

The Relationships value is at the heart of caregiver occupations and search for that value among applicants ought to be central to the assessment and hiring process for caregiver occupations. Recruitment and hiring processes that identify related applicant values will result in hiring caregivers that stay with the job longer because they are more apt to find it satisfying.

If worker retention is an objective, value assessment becomes the start of selecting and referring applicants with affinity for the work—those applicants most likely to stay with the job. Employers could use values in their recruitment strategy in two ways:

- Develop recruiting promotional materials that feature the Relationships value in word and picture.
- Cultivate referral sources that use values assessment as part of their process. Let sources know that the caregiver positions offer those with a high Relationships value opportunity to fulfill that need.

VALUES: Achievement

Achievement

Occupations that satisfy the Achievement value are results oriented and allow employees to use their strongest abilities, giving them a feeling of accomplishment.

Corresponding needs

The Achievement work value includes two needs:

- Achievement Workers get a feeling of accomplishment.
- Ability Utilization Workers make use of their individual abilities.

Satisfying the Achievement value in caregiver occupations

Achievement is relative to individual ability, circumstances, and values. Just getting the job is the first achievement. From there the achievements grow as one masters the skills and tasks.

Caregiver occupations offer the setting to experience daily achievements for the person who has high relationships values. The degree to which the Achievement value can be met in caregiver occupations depends on two factors:

Person-Job Fit Is there a good match between the individual's abilities, values, and the caregiver job? Over-qualified individuals may feel frustrated about not being able to use their skills. Under-qualified staff will be struggling to meet the status quo.

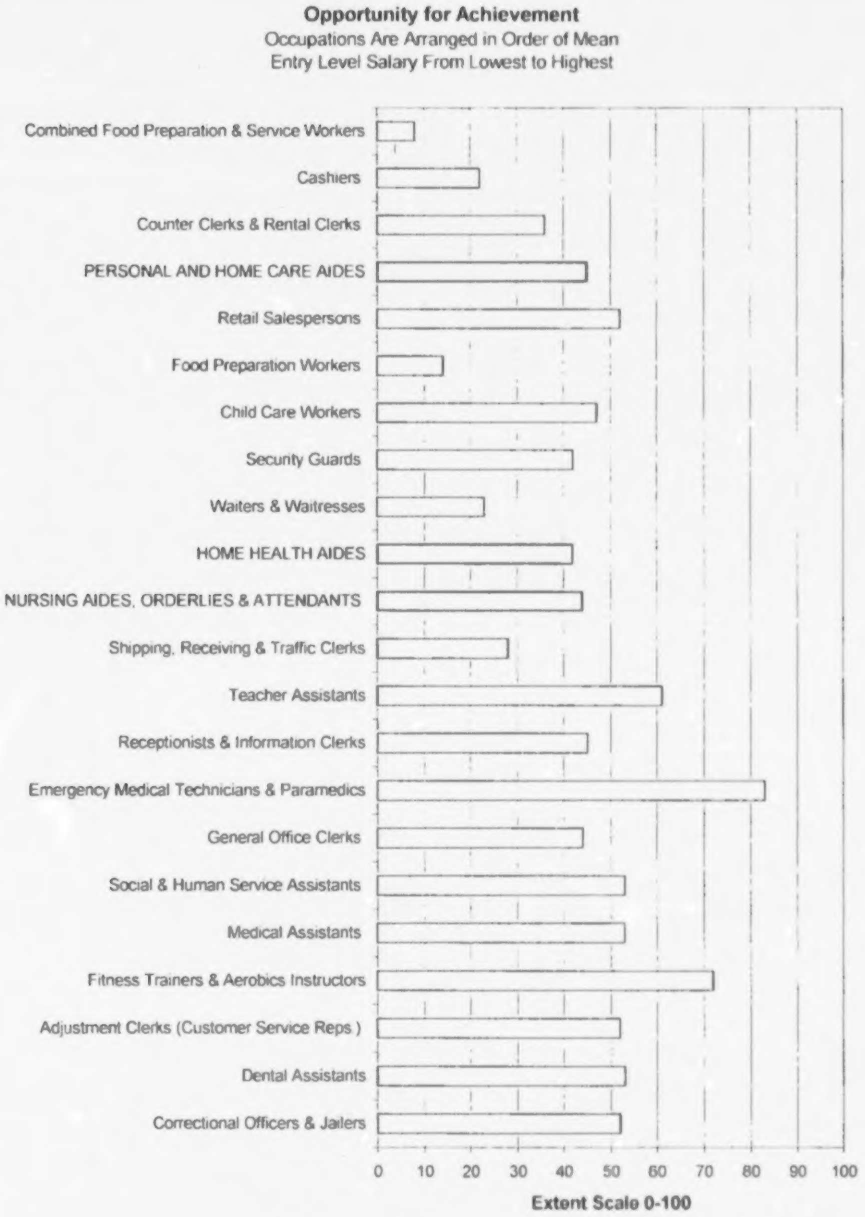
Staff to Patient Ratio The more patients a staff member has to serve, the more likely it is that simply getting through the day is an achievement. This is not the same kind of satisfying achievement as having encouraged a patient to eat more than they usually do or coaxing a smile out of a homesick patient.

Potential values conflict

Time could again create a values conflict if patient-staff ratios do not allow caregivers enough time with patients to do their job in such a manner that they can experience achievement.

Comparison

EXHIBIT 12.1 – Extent to Which Occupation Offers Opportunities for Achievement



Source: Trefoil, *Occupational Viewer 2000* with O*NET in it

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Comparison (continued)

Fitness trainers and emergency medical technicians offer higher levels of opportunity to experience Achievement, but most of the competing occupations are in the same range as the caregivers. The achievement in these occupations may be to leave them for something better.

Implications for recruitment and retention

Achievement is a powerful motivator, and caregiver employers need to look at ways to build more opportunities for achievement into the jobs. Recruiting individuals with high values for relationship and Achievement could relate the achievement opportunities to patient progress activities as well as career ladders.

VALUES: Recognition

Recognition

Occupations that satisfy the Recognition work value offer advancement, potential for leadership, and are often considered prestigious.

Corresponding needs

Four needs make up the Recognition work value:

- Social Status Workers are looked up to by others in their company and their community.
- Advancement Workers have opportunities for advancement.
- Authority Workers give directions and instructions to others.
- Recognition Workers receive recognition for the work they do.

Satisfying the Recognition value in caregiver occupations

Caregiver occupations would seem to offer the daily opportunity for the simple "thank you" kind of recognition for the services provided to patients and their families by caregivers. Other than that, caregiver occupations offer little satisfaction of Recognition needs, and workers who crave recognition will need to look elsewhere. Caregivers who have a high need for recognition may feel frustrated.

Values Conflict Even the simple thank you may not be forthcoming if patients have had to wait for services. Providing services in a timely manner may be beyond the control of the caregiver in understaffed circumstances.

Comparison

EXHIBIT 13.1 – Extent to Which Occupation Offers Opportunities for Recognition

Caregiver Occupations	**Extent Value Scale 1 to 100**
Nursing Aides, Orderlies, & Attendants	27
Personal & Home Care Aides	39
Home Health Aides	31
Mean for Competing Occupations	38

Source: Trefoil, *Occupational Viewer 2000* with O*NET in it

While caregiver occupations offer little opportunity for recognition, neither do the competing occupations.

Implications for recruitment and retention

According to the Herzberg theory, recognition is one of the motivating factors. Efforts at employee recognition such as "employee of the month" awards are well intended but do not compensate for inadequate job context (hygiene) factors as discussed in Section 10.

VALUES: Advancement

Advancement Advancement is a need within the Recognition value that merits closer examination because of its significance to many people.

Getting ahead Getting ahead is an important aspect of work. "Not getting ahead" is an oft-given reason for job dissatisfaction and moving on to another job or employer. The term is somewhat vague in meaning and may signify the user has only a nebulous idea that where they are at present is not where they should be.

What does "getting ahead" suggest? It could mean a feeling of competency about the job duties and a readiness to take on new responsibilities. It could mean keeping financially ahead of inflation or upgrading the family standard of living. The term is open to interpretation, but in the context of discussing their employment situation, speakers are probably referring to two related concerns: advancement and wages.

An astute job seeker considers the possible opportunities for advancement when choosing a career and seeking employment. Many job seekers, however, take the first job opportunity presented without assessing its advancement potential.

Advancement, on the other hand, is not everyone's goal. Many people find a niche where they feel comfortable with their competency to do the job well, take satisfaction in the contribution their work makes, and do not feel compelled to advance for the sake of advancement. Some reluctantly seek advancement solely for the financial gain and would otherwise be content with lesser positions.

Others might want advancement but are unwilling or unable to pay the price for advancement: further education and training. Barriers to further training include child care, domestic responsibilities, transportation, tuition expenses, and academic readiness. Successful pursuit of further education in addition to a caregiver's physically and emotionally demanding workday requires a support system and exceptional motivation.

Factors in advancement Advancement opportunities depend on many factors. Some of these factors are under the control of the organization, some in control of the employee. Some are economic conditions outside the control of either the employee or the organization.

Factors in advancement (continued)

Economic Factors

- Labor market supply and demand
- Demographics such as population age spread
- Growing or stagnant economy

Organization Factors

- Size of organization
- Career development policies and programs
- Recruitment processes
- Training programs
- Employee retention strategies

Employee Factors

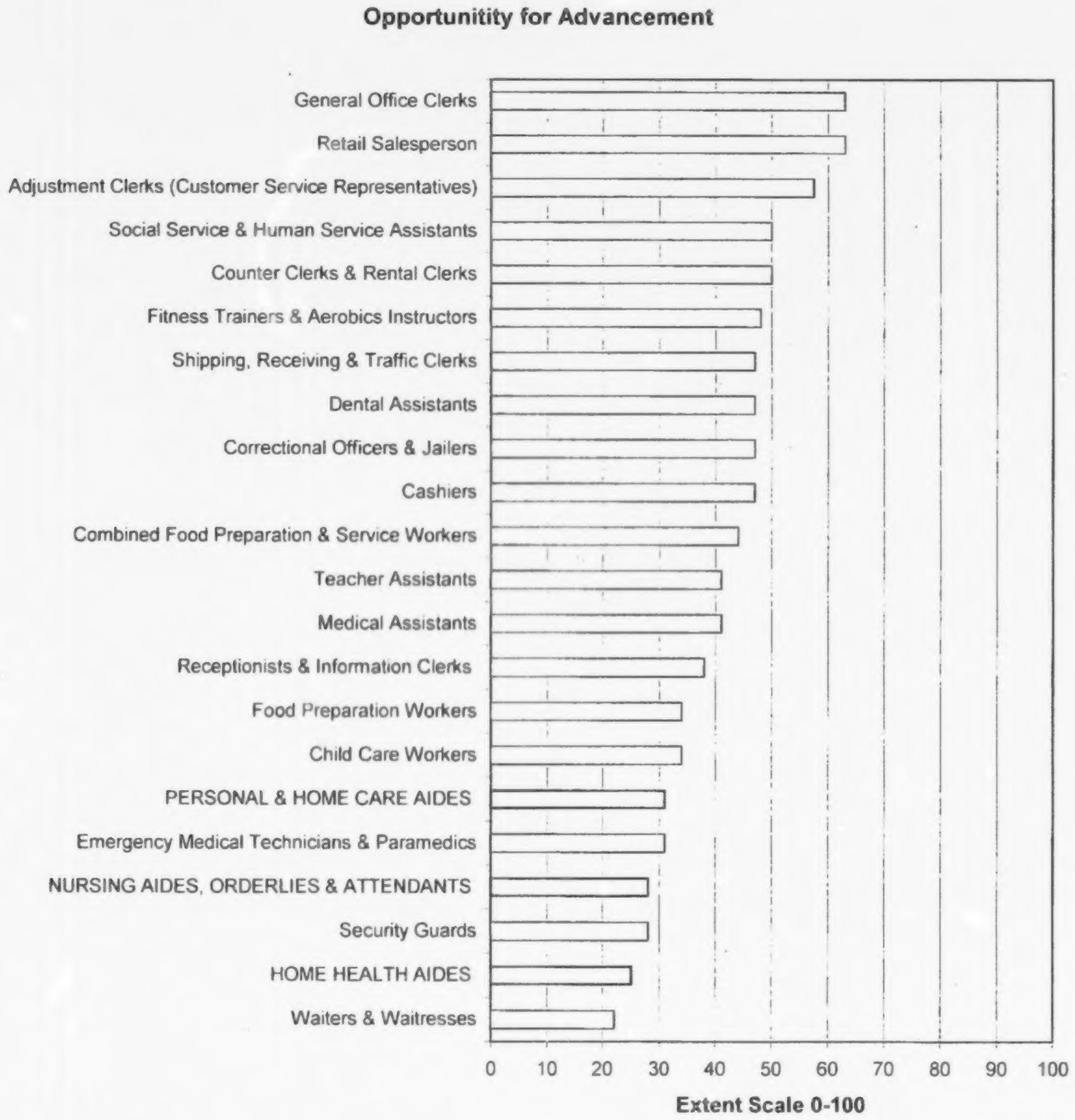
- Skills, knowledge, abilities
- Attitude
- Attendance
- Professional development
- Self-management skills
- Support system

Comparison

Caregiver occupations offer less opportunity for advancement than the average competing occupations according to the O*NET occupational analysis presented in Exhibit 14.1. These figures are affirmed by surveys reported in *The Hidden Health Workforce* stating that fewer than 25 percent of certified nurse assistants advance in long-term care facilities.[1] Opportunity for advancement is a low-level characteristic of caregiver occupations, and those who want the opportunity to advance might be well advised to choose another career area.

Caregiver occupations are more dependent upon further education for advancement than many of the competing occupations where job performance is a key element for advancement. Education should be a major consideration when an individual is considering caregiver occupations. Persons with aversion to further classroom training, and who also desire opportunities for promotion, should look at other occupations.

EXHIBIT 14.1 – Extent to Which Occupation Offers Opportunities for Advancement



Source: Trefoil, *Occupational Viewer 2000* with O*NET in it

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Career ladders

Career ladders are formal programs identified by organizations or industries to support the efforts of employees to advance through experience and/or education. Career ladders enhance the ability of employers to retain skilled employees in their workforce and are a valuable part of succession planning.

Most current career ladder efforts for caregiver occupations are directed toward nursing. Programs exist in partnership with community colleges and the California State University system to create nursing career ladders:

- Nursing Aide to Certified Nursing Assistant
- Certified Nursing Assistant to Licensed Vocational Nurse
- Licensed Vocational Nurse to Registered Nurse

Traditionally, nursing programs have only accepted students who could attend full-time. This leaves out students who must support a family but could work toward the LVN or RN degrees at a slower pace.

Some caregivers see advancement as moving to a job which gets them away from the bedside. Career ladders could be developed for those no longer interested in direct patient care. For example, nursing home administrator positions require a bachelor's degree in any major plus an internship. If staff can pursue a bachelor's in nursing, why not pursue a degree that leads to becoming a nursing home administrator? See Section 21, "Career Ladders," for suggestions of other occupations within the health services industry that might be suitable career ladders for employees who desire to move away from the bedside or have to because of physical injury.

Some employers offer tuition reimbursement as an incentive for employees to develop further skills and licensing in health career subjects. A few employers offer time off to attend training.

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[1] *The Hidden Health Care Workforce*, The Center for Health Professionals, University of California, San Francisco, 1999, p. 122.

VALUES: Working Conditions

Working conditions

Occupations that satisfy the Working Conditions value offer job security and good working conditions.

Corresponding needs

Six corresponding needs comprise the Working Conditions value:

- Security Workers have steady employment.
- Activity Workers are busy all the time.
- Variety Workers have something different to do every day.
- Independence Workers do their work alone.
- Working Conditions Workers have good working conditions.
- Compensation Workers are paid well in comparison with other workers.

Satisfying the Working Conditions value in caregiver occupations

Half of the needs that comprise Working Conditions would be categorized as hygiene or maintenance values in Herzberg's[1] model: Compensation, security, and working conditions. If these needs are not met, good workers will leave for greener pastures.

Potential value conflict

Most people work to provide the best quality of life for their family that they can. The low compensation and benefits offered to most caregivers would conflict with that value and drive them to seek other employment.

Comparison

EXHIBIT 15.1 – Extent to Which Occupation Offers Desirable Working Conditions

Caregiver Occupations	**Extent Value Scale 1 to 100**
Nursing Aides, Orderlies, & Attendants	48
Personal & Home Care Aides	48
Home Health Aides	51
Mean for Competing Occupations	49

Source: Trefoil, *Occupational Viewer 2000* with O*NET in it

As a whole, the group of competing occupations and caregiver occupations are valued about the same in desirable working conditions. A closer look at compensation or California wages is presented in Section 7 of this report. Detailed value and needs scales can be found in Appendix D.

Implications for recruitment and retention

"You get what you pay for" is an old maxim. A variation on that could be "You keep what you pay for." Such truisms might be ignored when high unemployment exists and people will take and hang on to jobs out of fear, but the economy and population demographics have changed. People have more choices. New technology also makes information about job choices easily accessible to people leading them to make more informed job and career decisions.

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[1] Frank J. Landy and Don A. Trumbo, *Psychology of Work Behavior*, The Dorsey Press, Homewood, IL, 1976, p. 301-303, 330-331.

VALUES: Support

Support

Occupations that satisfy the Support value offer supportive management that stands behind employees.

Corresponding needs

Three corresponding needs comprise the Support value:

- Supervision, Human Relations Workers have supervisors who back up their workers with management.
- Company Policies and Practices Workers are treated fairly by the company.
- Supervision, Technical Workers have supervisors who train their workers well.

Satisfying Support value in caregiver occupations

Workers in caregiver occupations need Support whether they personally hold that value high or not. Caregivers answer to so many people—supervisors, peers, patients, and public—all making demands upon them. Caregivers have a genuine need for clear policies and procedures and a need to know that management will back them up in applying those policies. Knowing they are in sensitive personal situations, dealing with sick or infirm patients further adds to the need for a supportive management environment.

Values conflict

Individual caregivers who possess high Support values are likely to become quite stressed if Support is not present.

Comparison

EXHIBIT 16.1 – Extent to Which Occupation Offers Supportive Management

Caregiver Occupations	Extent Value Scale 1 to 100
Nursing Aides, Orderlies, & Attendants	55
Personal & Home Care Aides	52
Home Health Aides	34
Mean for Competing Occupations	56

Source: Trefoil, *Occupational Viewer 2000* with O*NET in it

Home health aides occupations receive the lowest Support value of all the caregiver and competing occupations. This may be due to the isolated nature of their work.

Implications for recruitment and retention	Stress induced by inadequate Support could drive workers to seek types of jobs where responsibilities were clearly stated and consequences of error were not potentially life and death matters.

VALUES: Independence

Independence

Occupations that satisfy the Independence work value allow employees to work on their own and make decisions.

Corresponding needs

Three needs structure the Independence work value:

- Autonomy Workers plan their work with little supervision.
- Creativity Workers try out their own ideas.
- Responsibility Workers make decisions on their own.

Satisfying the Independence value in caregiver occupations

Individuals with a strong Independence value most likely will not even consider caregiver occupations in an institutional setting. Caregivers with a taste for independence could satisfy this need through working in private residential settings.

Caregivers who work in private homes may have more feeling of independence and responsibility as they are physically removed from the intervention of other health care team members and the patient may be almost totally dependent on them.

Values conflict

Caregivers in a nursing home work at the end of a long chain of command: doctor, administrators, RNs, and LVNs. Additionally, they have to answer to and deal with the patient and the patient's family and friends. There is very little room for independent behavior.

Comparison

EXHIBIT 17.1 – Extent to Which Occupation Offers Opportunity for Independence

Caregiver Occupations	Extent Value Scale 1 to 100
Nursing Aides, Orderlies, & Attendants	11
Personal & Home Care Aides	47
Home Health Aides	32
Mean for Competing Occupations	35

Source: Trefoil, *Occupational Viewer 2000* with O*NET in it

Of the competing occupations, only one—fitness trainers and aerobic instructors—offers a fairly high degree of opportunity to satisfy the Independence value.

Implications for recruitment and retention

Persons who exercise a strong Independence value are likely to find another type of employment as quickly as possible. They also have the potential of creating upheaval in a teamwork environment.

Workers may thrive better where they have some say as to the care of "their" patients. Long term care redesign efforts could identify and work on this by enlisting paraprofessionals in the data collection needed to support Total Quality Management (TQM) improvement efforts. Job enrichment measures possibly could be designed into long term care jobs to give more independence without sacrificing quality control. For example, could the CNA decide in which order to attend to assigned patients?

Would those with a high need for creativity find more gratification in the role of activity or recreation coordinator at the nursing home?

Interests: A Forecaster of Job Satisfaction

Interests

Along with values, interests contribute to work satisfaction. Interests generally refer to the like or dislike of activities. The interest component of Department of Labor's Occupational Information Network (O*NET) draws on the research of John L. Holland[1] whose interest assessment theory and related assessment tools are widely used in schools, colleges, and one stop centers. Holland's personality-based theory[2] makes the following assumptions:[3]

- People's occupations are extensions of their personalities
- People working in an occupation have similar personality characteristics
- Human personalities and work environments can be classified into six categories of vocational personalities and environments as seen in Exhibits 18.1 and 18.2

Holland's theory proposes that people function best and find job fulfillment in work environments that are in harmony with their personalities. Vocational assessment tools based on Holland's theory are used in high schools, colleges, and employment programs for adults.

EXHIBIT 18.1 – Holland Work Environment and Personality Types

Factor	Description	Symbol
Realistic	Realistic occupations frequently involve work activities that include practical, hands-on problems and solutions. They often deal with plants, animals, and real-world materials like wood, tools, and machinery. Many of the occupations require working outside, and do not involve a lot of paperwork or working closely with others.	R
Investigative	Investigative occupations frequently involve working with ideas, and require an extensive amount of thinking. These occupations can involve searching for facts and figuring out problems mentally.	I
Artistic	Artistic occupations frequently involve working with forms, designs, and patterns. They often require self-expression, and the work can be done without following a clear set of rules.	A
Social	Social occupations frequently involve working with, communicating with, and teaching people. These occupations often involve helping or providing service to others.	S
Enterprising	Enterprising occupations frequently involve starting up and carrying out projects. These occupations can involve leading people and making many decisions. Sometimes they require risk taking and often deal with business.	E
Conventional	Conventional occupations frequently involve following set procedures and routines. These occupations can include working with data and details more than with ideas. Usually there is a clear line of authority to follow.	C

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The blend

A 100 percent type for either individuals or occupations does not exist. No person is similar to only one category, nor does an occupation fit only one type. Rather, each person and each occupation is a blend of several types. Each occupation is represented by a three-letter Holland code. The first letter represents the most important type. The second and third letters represent type characteristics found within the occupation in descending order. According to the Holland research "All occupations tolerate a range of types; but some types appear to cope more successfully with an occupation's demands than do others."[4]

The Holland codes for the caregiver and competing occupations are summarized in Exhibit 18.2 and fully detailed in *Appendix E*.

EXHIBIT 18.2 – Holland Codes for Caregiver and Competing Occupations

Caregiver Occupations	**R**	**I**	**A**	**S**	**E**	**C**	**Symbol***
Nursing Aides, Orderlies, & Attendants	72	28	22	89	50	33	SRE
Personal & Home Care Aides	61	17	17	83	33	28	SRE
Home Health Aides	61	17	22	89	22	33	SRC
Mean for Caregiver Occupations	**65**	**21**	**20**	**87**	**35**	**31**	**SRE**
Mean for Competing Occupations	**52**	**25**	**24**	**64**	**50**	**59**	**SCR**

Standard Scale 0-100

*Realistic *Investigative *Artistic *Social *Enterprising *Conventional

Source: Trefoil, *Occupational Viewer 2000* with O*NET in it

Interests in caregiver and competing occupations

More often than not, if an individual's interests were satisfied by caregiver occupations, those interests would also be satisfied by the competing occupations.

- 47 percent of the competing occupations as well as all three caregiver occupations have S (Social) as their first type
- 68 percent of the competing occupations contain S somewhere in their code
- 74 percent of the competing occupations as well as all three of the caregiver occupations have codes that contain an R (Realistic)
- 79 percent of the competing occupations contain the E (Enterprising) or C (Conventional) in their code

Implications for recruiting and retention

There is less distinction and more blurring of distinctions among low level occupations. The similarity of interest factors in caregiver and competing occupations offers both positive and negative implications for caregiver employers.

On the negative side, the similarity in interest types makes it easier for workers to leave caregiver jobs for the competing occupations and still remain in a work environment that fits their personality type.

The positive note is that workers in those competing occupations could also find a person-work environment fit for themselves in caregiver occupations, other factors being equal. What would be the incentive that would draw them from the competing occupations to caregiver occupations?

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[1] J.L. Holland, *Making of vocational choices: A theory of vocational personalities and work environments*, (3rd ed.), Psychological Assessment Resources, Inc., Odessa, FL, 1997, cited by James Rounds et al, *Development of Occupational Interest Profiles for O*NET*, National Center for O*NET Development, Raleigh, N.C., 1999, p. 2.

[2] Ibid.

[3] Judith M. Ettinger [Ed.], *Improved Career Decision Making in a Changing World*, Garrett Park Press, Garrett Park, MD, 1991, p. 4-4.

[4] Gary D. Gottfredson, John L. Holland, *Dictionary of Holland Occupational Codes*, Psychological Assessment Resources, Inc., 3rd ed. Odessa, Florida, p. 13.

Industrial Injury and Workplace Violence

Danger ahead

It is the rare job seeker who investigates an occupation's industrial illness or accident rate. Some occupations readily convey the image of potential danger: Law enforcement officers, firefighters, crop dusters, race car drivers, and miners. How many job seekers would imagine they are putting their health in jeopardy by caring for the elderly and infirm? Danger is not the public perception of caregiver occupations.

Nationwide injury data

Industrial injury rates vary markedly depending upon the occupation. Nursing homes are among the top twenty fastest growing industries in the United States. The caregiver occupations also have the distinction of having one of the highest illness and accident rates. While back injuries account for a quarter of all the injuries reported in the private sector, back injuries account for almost half of the injuries in nursing homes according to the Service Employees International Union (SEIU).[1]

Bureau of Labor Statistics data indicate:

- Annual injuries and illness rates in the Health Services Industry from 1992 through 1998 were consistently higher than the All Private Sector Industry rate.
- Health Services Industry injury and illness rates have decreased over 24% from 1992 through 1998.[2]

Exhibit 19.1 provides the incidence rates of injuries and illnesses reported in private industry workplaces nationwide. Incidence rates are based on the number of reported cases per 100 equivalent full-time workers.

EXHIBIT 19.1 – Nationwide Rates of Workplace Injury and Illness

Year	1992	1993	1994	1995	1996	1997	1998
Health Services	10.2	9.6	9.4	9.2	9.1	8.4	7.7
All Private Industry	8.9	8.5	8.4	8.1	7.4	7.1	6.7

Source: Department of Labor, Bureau of Labor Statistics

California injury data

Bureau of Labor Statistics data for California injuries and illness indicate annual injuries and illness rates in the Nursing and Personal Care Industry from 1996 through 1998 were close to double the All Private Sector Industry rate.[3]

California injury data
(continued)

Exhibit 19.2 provides incidence rates of injuries and illnesses reported in all industries within California. Incidence rates are based on the number of reported cases per 100 equivalent full-time workers.

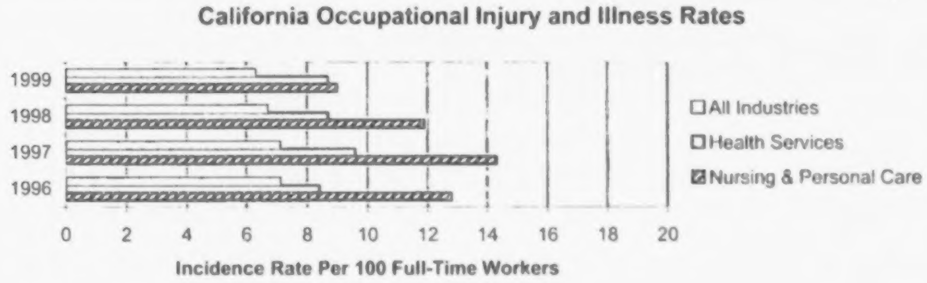
EXHIBIT 19.2 – California Rates of Workplace Injury and Illness

Year	1996	1997	1998	1999
Nursing & Personal Care	12.8	14.3	11.9	9.0
Health Services	8.4	9.6	8.7	8.7
All Industries	7.1	7.1	6.7	6.3

Source: Department of Labor, Bureau of Labor Statistics

Nursing and personal care aides suffer the largest percentage of injuries of the health services industry.

EXHIBIT 19.3 – California Occupational Injury and Illness Rates



Source: Department of Labor, Bureau of Labor Statistics

Workplace Violence

Limited information is available on the occurrence of non-fatal assaults in the nursing home industry. However, a report published by the National Institute for Occupational Safety and Health indicated that nursing home assaults comprised 27 percent of the 22,400 work place assaults in 1992.[4] The source of the injury in 45 percent of the cases was a health care patient. The California Division of Occupational Safety and Health developed publication, *Guidelines for Security and Safety of Health Care and Community Service Workers*[5] to respond to the problem.

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Workplace violence
(continued)

As the population of older people continues to grow, the numbers of patients suffering from Alzheimer's disease and other forms of dementia will increase in nursing facilities. Violent behaviors associated with dementia related illnesses may result in increased workplace violence.

Implications for recruitment and retention

Only those who may know, or know of, caregivers and other health care personnel who have been injured on the job would be wary of the risk inherent in these occupations. When making career decisions, informed applicants may weigh the risk of occupational illness or injury against the advantages offered by a job such as wages, benefits, status, or career advancement opportunities.

It is unknown to what extent caregiver occupations are perceived as a risky occupation among potential applicant groups or how aware those applicants are of the limitations a back injury places on future employment options. The adverse influence on recruitment would probably not be great because of low public awareness.

The effect on worker retention, however, could be significant. When caregivers see their co-workers suffering back injuries, and reduced job opportunities, it could motivate them to find a less risky job before they, too, have limiting injuries.

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[1] Service Employees International Union (SEIU). *Caring Till It Hurts.* 1997, p. 2.

[2] Department of Labor, Bureau of Labor Statistics, "Occupational Injuries and Illnesses: Industry data." Retrieved from: http://stats.bls.gov/oshhome.htm

[3] Ibid.

[4] "Violence in the Workplace," *Current Intelligence Bulletin 57*, Publication No. 96-100, U.S. Department of Health and Human Services, National Institute for Occupational Safety and Health, DHSS (NIOSH), July 1996, p. 1.
Retrieved from http://www.cdc.gov/niosh/violnonf.html

[5] Division of Occupational Safety and Health, *Guidelines for Security and Safety of Health Care and Community Service Workers*, "Nonfatal Assaults in the Workplace," March 10, 1998, p. 1-2
Retrieved from http://www.dir.ca.gov/dosh/dosh_publications/hcworker.html

Stressors

Job stress

Life can be stressful. Healthy stresses, such as the challenge of learning something new, set the adrenaline racing. Frustrating minutiae of daily life, from burnt toast to traffic snarls, can culminate in feelings of stress. For some people, their job is another source of stress.

The National Institute of Occupational Safety and Health (NIOSH) defines job stress as "the harmful physical and emotional responses that occur when the requirements of the job do not match the capabilities, resources, or needs of the worker. Job stress can lead to poor health and even injury."[1]

Stress caused by mismatch

Some job stress is caused by a mismatch between the person's characteristics and the job's requirements, for example:

- Persons who are excessively fearful of disease might find working in a caregiver or healthcare setting stressful.
- Exceptionally shy individuals might be stressed by the nearly continuous social interaction required of caregivers.
- Unruly or physically aggressive patients might produce stress in a timid caregiver.

Individuals with different personal characteristics could deal with these same situations with less feelings of stress. Recruitment and selection processes that result in a good person-job fit can minimize stress generated by an inappropriate match of worker to job.

Stress induced by working conditions

While an inappropriate match of person to job can be the origin of some job stress, the majority of job stress is caused by working conditions that most people would find stressful. NIOSH lists six job conditions that contribute to job stress:[2]

1. The Design of Tasks - Heavy workload, infrequent rest breaks, long work hours and shift work; hectic and routine tasks that have little inherent meaning, do not utilize workers' skills, and provide little sense of control.
2. Management Style - Lack of participation by workers in decision-making, poor communication in the organization, lack of family-friendly policies.
3. Interpersonal Relationships - Poor social environment and lack of support or help from coworkers and supervisors.
4. Work Roles - Conflicting or uncertain job expectations, too much responsibility, too many "hats to wear."
5. Career Concerns - Job insecurity and lack of opportunity for growth, advancement, or promotion; rapid changes for which workers are unprepared.
6. Environmental Conditions - Unpleasant or dangerous physical conditions such as crowding, noise, air pollution, or ergonomic problems.

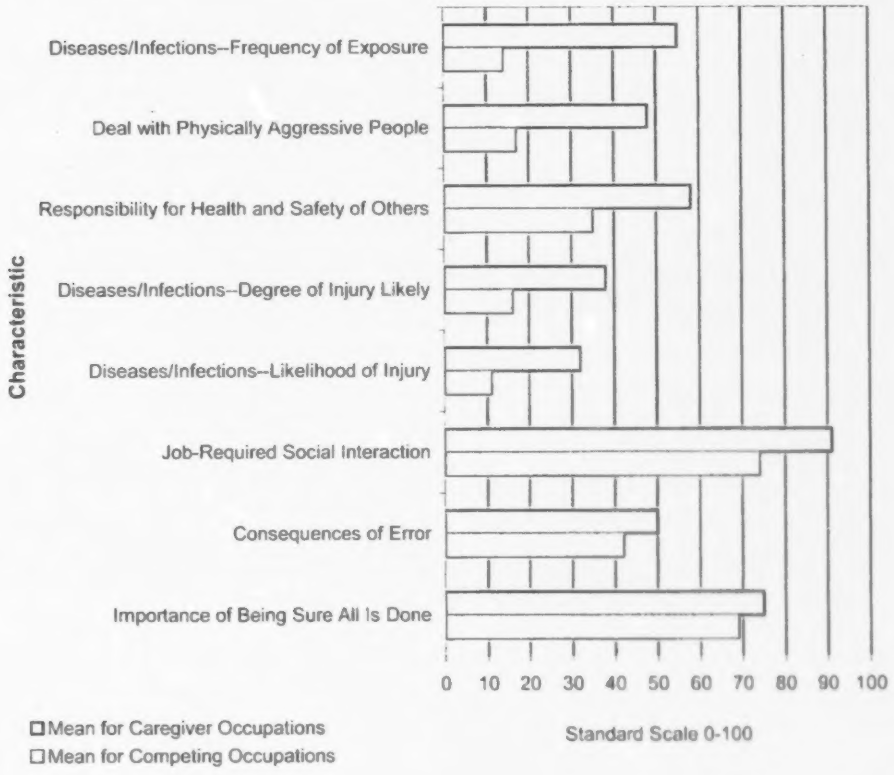
Working conditions that contribute to stress will vary among industries and industry segments, specific employers, managers, and supervisors.

Stress in caregiver jobs and competing occupations

While recognizing that the job as a source of stress depends upon specific workers and settings, some standardized measures of occupational characteristics that often bring about stress can be compared from occupation to occupation. Exhibit 20.1, Comparison of Potentially Stressful Job Characteristics for Caregivers and Competing Occupations, looks at eight occupational characteristics that could trigger job stress for many individuals.

The eight characteristics selected relate to one or more of the following NIOSH stress spawning conditions: design of tasks, work roles, or environmental conditions.

EXHIBIT 20.1 – Comparison of Potentially Stressful Job Characteristics for Caregiver and Competing Occupations



Source: Trefoil, *Occupation Viewer 2000*, O*NET in it

See *Appendix D* for characteristic and scale definitions and specific data for caregiver and competing occupations.

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How stressful are caregiver jobs?

Indicators of job stress include objective measures of absenteeism, illness, turnover rates, and performance problems according the NIOSH report.[3] The following addresses these measures for caregiver occupations:

Turnover

The annual turnover rate for caregivers is reported as 42 percent, 67.8 percent, or over 100 percent by various studies.[4] No exit interview data has been collected from caregivers to pinpoint the causes of this turnover.

Absenteeism and Illness

Nurse aides and orderlies have the third highest number of occupational injuries or illnesses requiring days away from work compared to other occupations according to national data from the Bureau of Labor Statistics.[5] Only truck drivers and laborers have more. Exhibit 20.2 displays available data on the competing and caregiver occupations related to absenteeism and occupational injury and illness.

EXHIBIT 20.2 – 1998 Number of Nonfatal Occupational Injuries and Illnesses Involving Days Away from Work—National Data

Occupation	Number of Injuries and Illnesses	Number of Workers	Incidence Rate Per 1000 Workers
Nursing aides, orderlies	84,100	1,366,600	61.5
Cashiers	26,100	3,197,800	8.2
Sales workers	22,900	4,056,500	5.6
Miscellaneous food preparation	22,000	1,256,300	17.5
Shipping & receiving clerks	18,500	999,900	18.5
Waiters & waitresses	15,500	2,018,600	7.7
Health aides	10,400	745,700	13.9
Guards and police, except public	9,500	1,026,700	9.3

Sources: Bureau of Labor Statistics, *Compensation and Working Conditions*, Summer 2000
Bureau of Labor Statistics, Office of Employment Projections

Implications for recruitment and retention

The high turnover level in caregiver occupations suggests that workers find something about the job or working conditions stressful enough to leave. Turnover is costly. Recruiting, advertising, job fairs, training and lost productivity are but the obvious costs. Monies spent to identify and ameliorate those conditions could actually improve the bottom line.

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[1] National Institute for Occupational Safety and Health (NIOSH), *Stress...At Work*, 1999, p. 5. Retrieved at http://www.cdc.gov/niosh/stresswk.html

[2] Ibid., p. 7.

[3] Ibid., p. 13.

[4] *The Hidden Health Care Workforce*, The Center for Health Professionals, University of California, San Francisco, 1999, p. 71.

[5] Bureau of Labor Statistics, "Occupational Injuries and Illnesses and Work-related Fatalities Technical Note," *Compensation and Working Conditions*, Summer 2000.

Career Ladders for Caregivers

Career ladders or career paths?

Career ladders are occupational classification structures that allow an individual to progress in an organization. Individuals advance through successful performance of the current job and by acquiring skills from additional education or training that will prepare them for the next job level, or rung, on the career ladder.

Formal career ladders exist primarily in organizations large enough to have a hierarchy of related occupations plus enough growth and turnover to allow for movement up the ladders. To move up a career ladder requires more than just accumulating time in an organization; one must demonstrate competence and the readiness to take on new responsibilities.

The use of career ladders serves two important functions in organizations:

Employee Retention - Career ladders improve morale and provide an incentive for good employees to stay with an organization when they see opportunities to advance. Employers can save on costly turnover and recruitment expenses.

Succession Planning - Career ladders enable organizations to plan for the skills, knowledges, and abilities they need now and in the future in their workforce.

In smaller organizations, career ladders may be informal and depend upon the ability of employees to identify potential opportunities, and position or prepare themselves for advancement. Mentoring relationships between experienced employees or supervisors direct employees toward possible career paths.

Career path is probably a more accurate term than career ladder to reflect the type of movement that occurs in the workplace today. Twenty years of corporate flattening, downsizing, rightsizing, and outsourcing have curtailed formal career ladders in organizations. Instead, individuals take a job, develop skills, and take their skills where they find the best return for their investment of time. Sometimes career paths are lateral rather than up as "ladder" implies. Lateral career moves allow workers to transfer their skills to a different, but related, occupation. Monetary gain is usually not the motive for lateral career moves. For example, a nurse aide who can no longer work in that occupation because of back injuries may move to a position as an activity assistant or medical records clerk.

Skill standards

Related to career ladders, but different, are the occupational skill standards established by some industries. Such skill standards are recognized within an industry and are portable from employer to employer and across geographic boundaries. Skill standards spell out precisely the competencies needed and the way to acquire those competencies. Skill standards certify an employee's competencies to any employer within an industry. The National Skill Standards Board (NSSB) has identified 15 industry sectors that share similar skill requirements.[1] Health and Human Services is one of the 15 industry sectors that NSSB hopes will participate in establishing skill standards in a coordinated manner.

Nursing career ladders

Most current career ladder efforts for caregiver occupations are directed toward nursing. Programs exist in partnership with community colleges and the California State University system to create nursing career ladders:

- Nursing Aide to Certified Nursing Assistant
- Certified Nursing Assistant to Licensed Vocational Nurse
- Licensed Vocational Nurse to Registered Nurse

Traditionally, nursing programs have only accepted students who could attend full time. This leaves out students who must support a family but could work toward the LVN or RN degrees at a slower pace.

Some employers offer tuition reimbursement as an incentive for employees to develop further skills in health career subjects. A few employers offer time off to attend training.

Several factors contribute to an individual's efforts to successfully climb a hierarchical career ladder:

- Aptitude to develop the required skills, knowledge, and abilities
- Academic readiness to pursue further education
- Financial incentive to make the necessary sacrifices
- Emotional support and encouragement from family, friends, and employers
- Desire to achieve and advance

Nursing career ladders (continued)

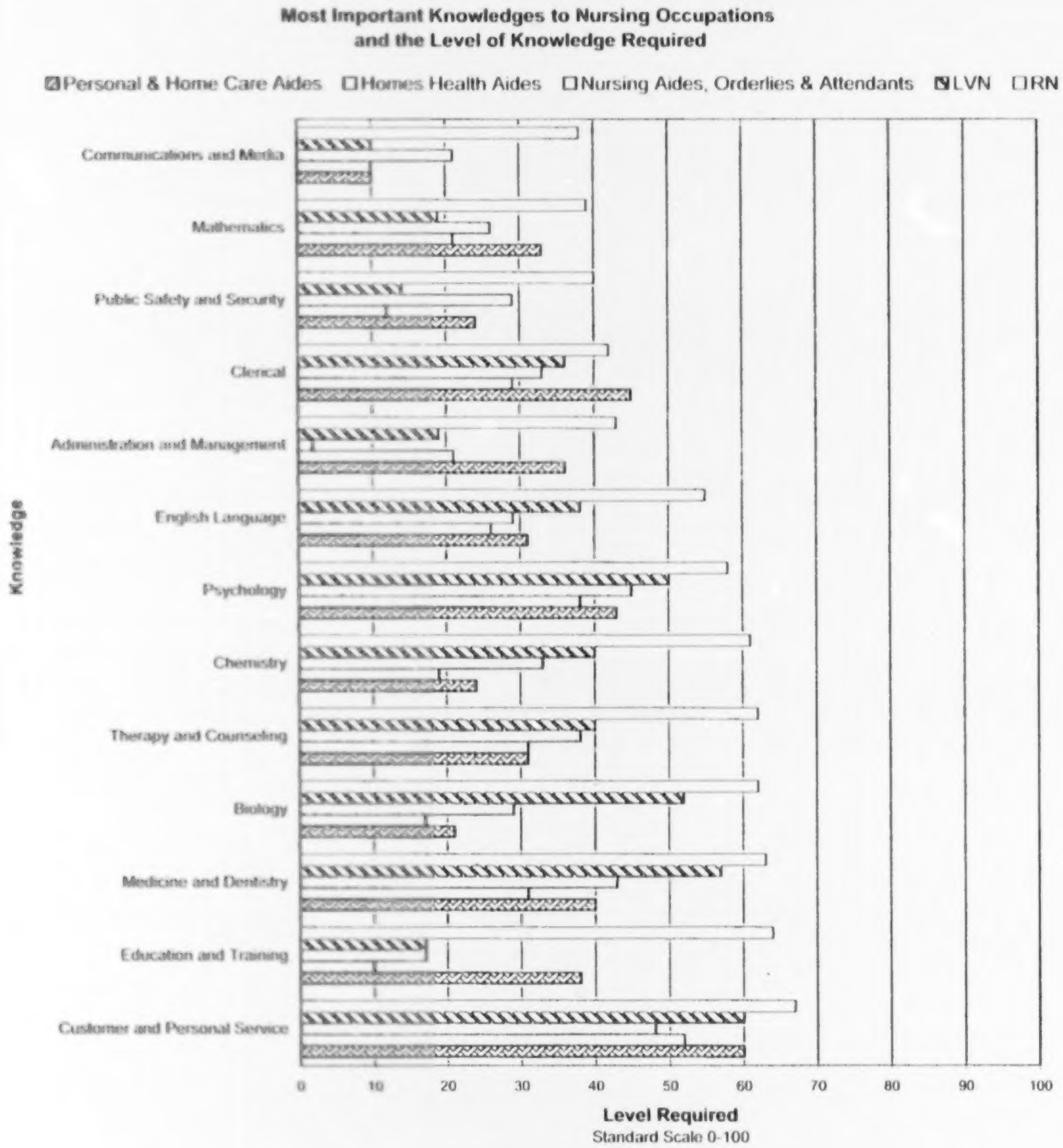
Exhibits 21.1, 21.2, and 21.3 compare information from the O*NET database on the skills, knowledge, and ability (SKA) levels for the three caregiver occupations and licensed vocational nurses (LVNs), and registered nurses (RNs). The most important ten of each of the three characteristics--knowledge, ability and skills--were selected. Many of the most important SKAs were common to the five occupations so the lists only vary slightly in length: 13 knowledges, 14 abilities, and 12 skills. Characteristics in each chart are listed in order of level for RNs from lowest to highest.

SKA gap?

Since the education requirements for the occupations vary from high school diploma to an associate or bachelors' degree, it is to be expected that the SKAs would reflect those differences.

The difference is most pronounced in ability level requirements. Abilities enable individuals to learn the skills necessary to perform the tasks of the occupation. This is the foundation from which the knowledge and skills develop.

EXHIBIT 21.1 – Comparison of Knowledge Levels Required for Nursing and Caregiver Occupations



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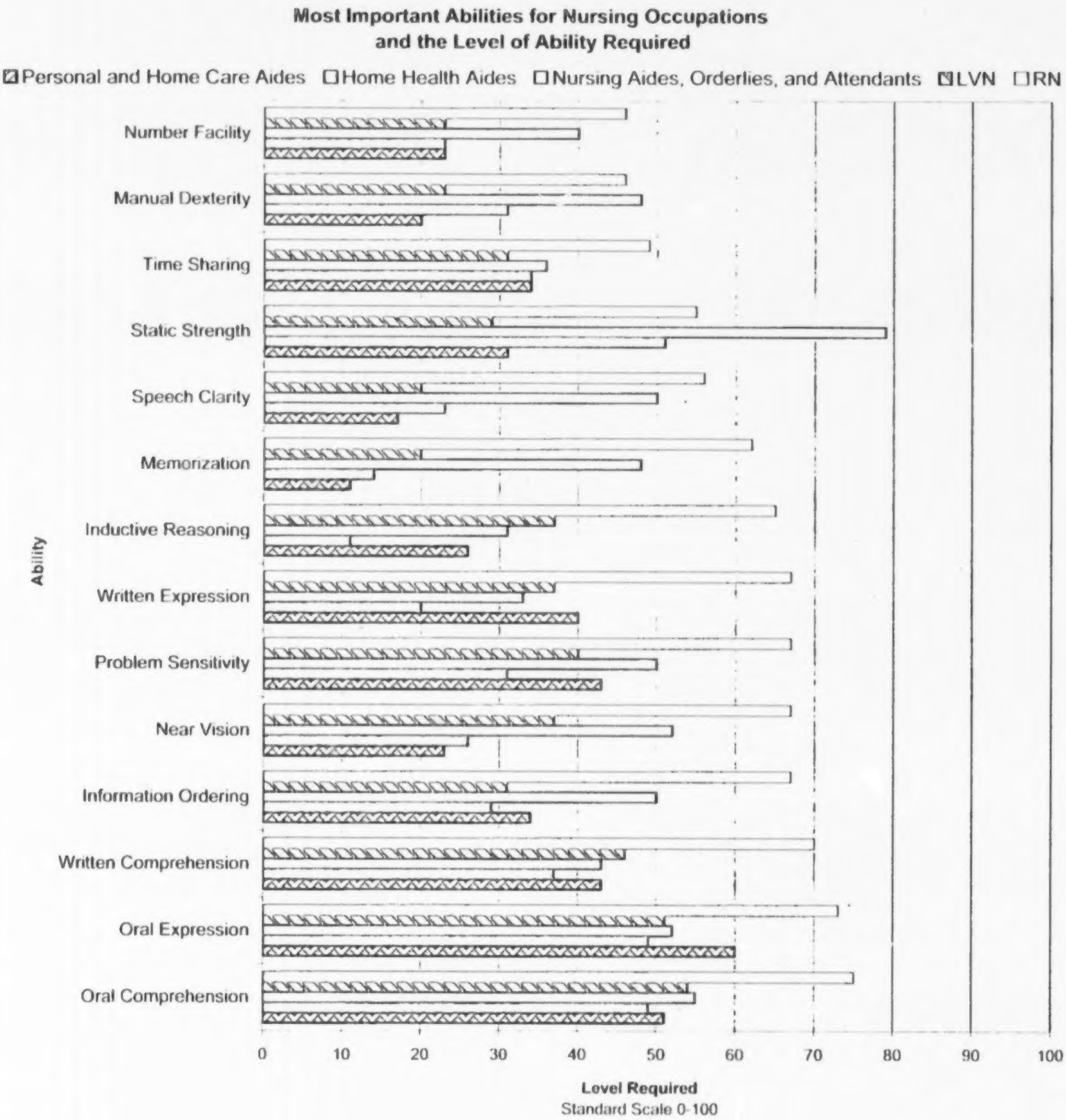
Source: Trefoil, *Occupational Viewer 2000* with O*NET in it

EXHIBIT 21.2 – Comparison of Ability Levels Required for Nursing and Caregiver Occupations



Source: Trefoil, *Occupational Viewer 2000* with O*NET in it

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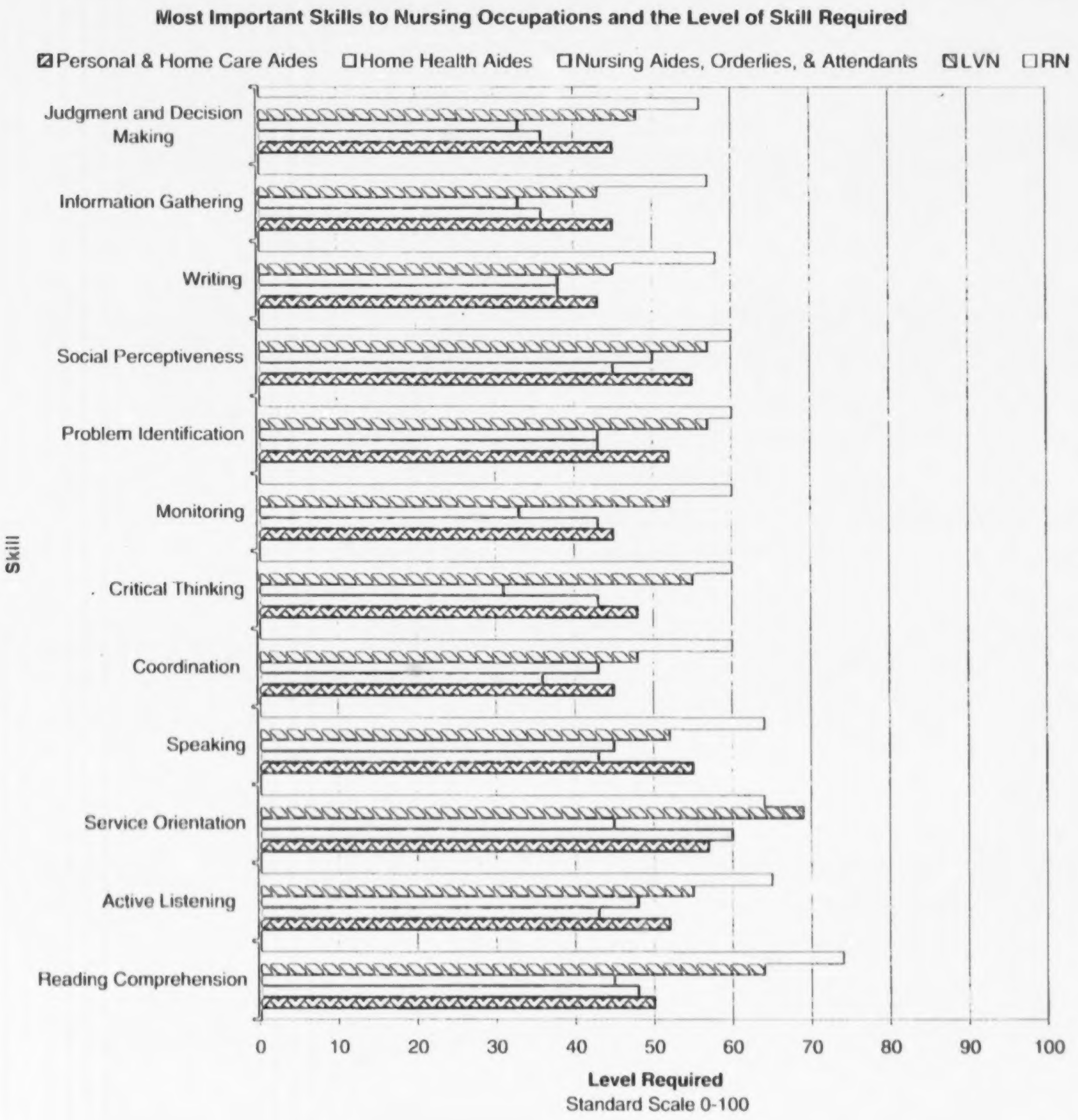
EXHIBIT 21.3 – Comparison of Skill Levels Required for Nursing Occupations and Caregiver Occupations



Source: Trefoil, *Occupational Viewer 2000* with O*NET in it

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Career paths other than nursing

While nursing career ladders offer the most opportunity for advancement due to volume of jobs, nursing is not the only career path. Caregiver occupations provide foundation skills and knowledge that individuals can use to pursue other health careers depending upon their abilities, interests, and resources. Those caregivers that wish a career in the health services industry have a wide range of choices available with varying education, skill, and certification requirements. Some career paths are within skilled nursing facilities; others are in other health care settings such as hospitals or medical offices and clinics.

Some caregivers see advancement as moving to a job which gets them away from the bedside. Career options within skilled nursing facilities for those no longer interested in direct patient care because of personal choice or physical injury include recreation, billing and record keeping, reception, social service occupations. Where each skilled nursing facility has many nursing assistants, only a few of the other positions are needed at each site.

Exhibit 21.4 lists occupations requiring a bachelor's degree or less found within the four segments of the health care industry where most employment occurs: Hospitals; Medical Offices; Nursing and Personal Care Facilities; and Home Health Care Facilities. The occupations are clustered by education level generally required according to the Bureau of Labor Statistics (See *Appendix B*). Within each cluster, occupations are listed in order of the estimated number of job opportunities a year across all industries in California.

See *Appendix F* for resources that provide detailed occupational information for career exploration purposes.

Implications for recruitment and retention

Career ladders can be an incentive for individuals to take a job and grow their career within an organization. When a significant difference in SKAs exist between the entry occupation and the top of the career ladder, it increases the complexity of the recruitment process. With career ladders in mind, recruiters must not only determine whether the candidates could perform the caregiver occupations, but whether they have the potential to participate in career ladders leading to LVN and RN positions, or other positions in the organization.

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EXHIBIT 21.4 – Optional Career Paths by Education Level

Occupation	Average Annual CA Jobs Open[a] 1998-2008	Percent Employed in Industry:[b] Hospitals	Medical Offices	Nursing and Personal Care Facilities	Home Health Care Facilities
SHORT ON-THE-JOB TRAINING					
Nursing Aides, Orderlies, & Attendants	3,304	25.4	0.5	50.7	3.1
Home Health Aides	1,531	11.4	2.8	13.7	30.3
Personal & Home Care Aides	1,052	1.9	0.0	6.2	15.8
Pharmacy Aides	357	47.2	9.9	0.4	0.4
Psychiatric Aides	103	47.2	0.2	18.3	0.0
MODERATE ON-THE-JOB TRAINING					
Medical Assistants	4,402	8	74.7	3.2	0.1
Dental Assistants	2,030	0.4	2.2	0.0	0.0
Social & Human Service Assistants	1,555	4.5	1.3	1.6	0.4
Pharmacy Technicians	554	10.2	0.3	0.0	0.0
Dispensing & Measuring Opticians	315	12.2	1.7	0.0	0.0
Electroneurodiagnostic Technologists	18	85	15	0.0	0.0
Electrocardiograph Technicians	14	77.8	20	0.7	0.0
Statistical Clerks	70	30.1	6.1	1.2	0.3
LONG-TERM ON-THE-JOB TRAINING					
Housekeeping Supervisors	265	9.9	0.5	10	0.1
POST-SECONDARY VOCATIONAL EDUCATION					
Licensed Vocational Nurse	2,193	36.2	12.7	25.7	6.8
Medical Secretaries	833	16.3	59.7	1.5	1.2
Emergency Medical Technicians	780	17.5	1.2	0.0	0.0
Surgical Technicians	474	78.8	15	0	0.5
Psychiatric Technicians	150	75.4	2	1.7	0.0
ASSOCIATE DEGREE					
Registered Nurse	8,156	64.9	8.7	6.3	4.8
Dental Hygienists	1,177	0.2	0.8	0.0	0.9
Medical Records Technicians	1,054	26.8	46.1	12.7	3.7
Radiologic Technologists	668	55.7	33.7	0.2	0.0
Respiratory Therapists	625	92.4	3.2	1	0.0
Medical & Clinical Laboratory Technologists	549	53.1	16.6	0.1	0.0
Physical & Corrective Therapy Assts. & Aides	520	29.6	7.4	10.1	0.6
Cardiology Technicians	138	80.6	18.4	0.3	0.0
Occupational Therapy Assistants & Aides	127	20.7	7.9	12.6	0.2
Dietetic Technicians	84	49.4	4.8	35.4	0.2
Radiation Therapists	64	63.1	26.4	0.0	0.0
Nuclear Medicine Technologists	40	82.2	16.7	0.0	0.0
BACHELOR'S DEGREE					
Recreation Workers	1,834	0.6	0.2	6.3	0.1
Medical & Clinical Laboratory Technicians	750	36.5	23.9	0.3	0.4
Physician's Assistants	524	19.7	64.5	0.5	0.0
Occupational Therapists	262	35.1	1.4	10.5	5.3
Dieticians & Nutritionists	257	32.7	15.3	8.1	1.3
Recreational Therapists	35	48	0.2	27.7	0.1
BACHELOR'S DEGREE AND WORK EXPERIENCE					
Medicine and Health Services Managers	1,317	39.3	22.6	8.1	3.5

Source: Employment Development Department, Labor Market Information Division

[a] Number of job openings in all industries. [b] Primary health care employers. Percentage will not add to 100 since only four industries are represented in this data.

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Implications for recruitment and retention (continued)

If candidates do have the potential and expectations for advancement, then management would be wise to have programs that support such career ladders: mentoring, child care, time off for education, flexible scheduling, opportunities to use new skills.

Nursing and convalescent homes do not have as large a variety of health care occupations within them as hospitals. It would not be realistic that every entry-level nurse aide could eventually climb a career ladder to RN. Many would not have the ability or the desire. However, they might target other health-related occupations in other health care settings. Knowing there are career paths that start in convalescent homes and lead elsewhere could attract interested workers who want to establish foundation skills in health care.

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[1] National Skill Standards Board, *Built to Work, A Common Framework for Skills Standards*, 2000, p. 7. Retried from http:// www.nssb.org

Recommendations for Recruitment and Retention

Caregiver occupations at a crossroad?

Caregiver occupations have existed for years in the secondary labor market. Changing demographics and economic conditions have curtailed the supply of workers available for low-wage occupations that offer little prospect for advancement. Sections 5 through 21 examined in detail entry-level caregiver occupations and occupations competing for novice job seekers. Caregiver occupations compared unfavorably in significant points:

- Caregiver wages are lower than many of the competing occupations
- Caregivers have less access to affordable benefits such as health insurance
- Caregivers have a much greater chance for occupational injury or illness
- Caregivers have greater training and certification requirements than competing occupations
- Caregivers have less opportunity for advancement

Given the supply-demand labor market realities, what steps can health care providers take to recruit more workers and retain them in health care occupations?

Exit interviews

It is easy to assume that caregivers leave their jobs for better pay and working conditions because those shortcomings seem obvious. Better information regarding the reasons caregivers quit their jobs is needed to determine patterns of turnover and dissatisfaction to help set priorities for change. The health care industry should establish a standard format for exit interviews and share such information through professional associations. Such information would be invaluable to individual employers and, in the aggregate, to the industry as a whole. Design of an exit interview needs to include information as to whether workers are changing occupation as well as changing employer. If so, what kind of occupations will they go to? Exit information would be most valuable if it could be considered in contrast to or along with information about employee longevity in the occupation and performance rating from supervisor.

Best practices

The industry should identify those employers who have lower turnover and fewer incidents of occupational injuries and illness. These employers can be looked to for "best practices" in employee scheduling, hiring and selection processes, employee training, and labor-saving techniques that prevent back injuries.

Marketing to values

Persons attracted to caregiver occupations will be persons who hold the work value *Relationships* in high regard. Caregiver employers and professional associations need to market caregiver occupations to appeal to the *Relationships* value. Marketing materials need to send the message that caregivers are "people who care about people" to paraphrase the words from the Barbra Streisand song. Caregivers are the people you want holding your hand when you're sick. Persons with these values are persons who are more likely to choose the work despite the wages and working conditions. They will carry on for the sake of the people they are helping and because of the great personal satisfaction they receive by helping. A team of marketing and advertising experts could develop a campaign that includes the following elements:

- Public service spots showing caregivers in action
- Caregiver statements about the rewards of working with the elderly
- Statements from the elderly about the difference caregivers make in their lives
- Emphasize that only special people have what it takes to be a caregiver. Phrases from the Richard Adler and Jerry Ross song, *Heart*, catch the spirit of caregiver occupations: "You gotta have heart, miles and miles of heart…You can be a hero…"

Not many occupations offer the opportunity to be a hero(ine) every day, though few people see caregiver occupations that way. It will take a concerted marketing campaign to communicate that view. Appeal to people who are seeking work that makes a meaningful contribution.

Assessment

By selecting individuals who have the interest and skills to make a good "job-person match" for caregivers, training providers can focus training on individuals with a good chance of success. Similarly, employers can hire workers who are more likely to stay on the job. There are many assessment instruments available to aid in making a good person-job match. In order to improve retention in the caregiver industry, the Caregiver Training Initiative collaborative regions should make use of assessment tools such as the new assessments available through the U.S. Department of Labor's Occupational Information Network (O*NET). These three assessments are currently available as paper-and-pencil instruments and will soon be available in a computer version:

Assessment (continued)

- Interest Profiler -- Participants identify and learn about broad interest areas most relevant to their work-related interests. The tool helps users discover the type of work activities and tasks that they would like and find exciting on the job.
- Work Importance Locator -- This assessment helps users clarify what they find most important in jobs. Participants can identify occupations included in O*NET that they are likely to find satisfying based on the similarity between what is important to them in a job and the characteristics of the occupations.
- Abilities Profiler -- An ability assessment developed for counseling and career exploration. It measures nine job-relevant abilities, including administration guidance and software. Its reports provide not only scores, but instructions on understanding and using the scores with O*NET information. Participants receive a computer-generated score report. The report provides customized information that the individual can use to explore careers.

Remedial and literacy skills

Some persons who desire caregiver careers may have difficulty passing the licensing tests because of literacy or academic deficiencies. Educators, employee organizations, and employers should develop remedial and tutoring programs to facilitate entry into the caregiver occupations for persons who show potential and interest. Assessment programs can identify skills and abilities that need to be strengthened before the caregiver can proceed through training and licensing with confidence in a positive result.

Core competencies and career paths

Retention in caregiver occupations could be improved with a combination of career ladders and career paths. Workers will be drawn to caregiver occupations if they see paths to advancement within the health and human services industry.

Health care educators, industry segments, and employee representatives need to work together to develop competency clusters that enable workers to target advancement opportunities within health care and obtain certification in the needed competencies. Articulation between health care segments and educational institutions can reduce the number of redundant courses required as workers acquire more skills or shift their focus

Core competencies and career paths
(continued)

within health careers. All training should be articulated to eliminate unnecessary duplication and ensure standard competencies. The National Skills Standards Board process would be a useful vehicle to develop skill standards and establish health career pathways.

Once skill standards are in place, training becomes tailored to the individuals and bridging skill gaps rather than requiring people to repeat courses for skills they have already mastered. For example, in order to shorten the CNA training time required for experienced nurse aides, tailor training programs for:

- Nurse aides with less than four months' experience in any setting
- Nurse aides with no experience
- Nurse aides with several years acute care hospital experience

Financial incentives

Caregiver occupations will never attract those who are motivated by "big bucks," though salaries will inevitably rise because of supply-demand realities. There are financial incentives aside from improved wages that could bolster recruitment and retention:

Finder Fees – Employees receive a fee for each person they refer who is hired. The fee could be paid in installments: One-third at hiring, one-third at probation or certification, and one-third at one year of service.

Retention Bonus - Caregiver employers can offer "retention bonuses" to employees who stay longer than 6 months, one year, etc. This practice is common in the retail sales establishments at Christmas-time. These bonuses range from $50 to $150.[1]

Paid Leave – Even a small amount of paid time off for employees would be a big plus in the board and care segment of the industry where it is nearly non-existent.

Employee Ownership – Use profit sharing or some form of employee ownership to increase employee longevity and quality of service. As "owners" of the organization, caregivers will have enhanced interest in the image, quality, and efficiency of the workplace.

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[1] *BLS Daily Report*, Nov. 3, 2000

Workplace reengineering

Investigate redesign of caregiver occupations and workplace to include more opportunities for the motivating factors: achievement, recognition, responsibility, and advancement. Employers might want to reengineer the workplace so frontline workers can participate in care-giving decisions.

For further study

Initiate an "Americorps" for caregivers. Hire workers for a one-or two-year contract. At the end of their "service," they are given vouchers for LVN, RN, or other medical specialty training program and many choices of locations.

Similarly, high school students could receive exposure to caregiver occupations through community service classes for academic credit.

Summary

There is no one, or easy, answer to the question, how to make caregiver occupations a "good" job in the eyes of job and career seekers. The most important part of the answer lies in targeting people who would see caregiver occupations as an opportunity to do good; i.e., persons with a high *Relationships* work value. Part of the solution is to improve the wages, benefits, and working conditions. Another facet of the solutions mix is collaboration between health care segments, employee organizations, and educators to establish skill standards and career paths.

The Quest for Caregivers was written from the point of view of persons selecting a job or career and the factors they should consider in making that choice (see Exhibit 3.1). For some seekers, caregiver occupations would have more minuses than pluses. For others, a caregiver occupation could add up to a rewarding career choice. Find those people and reward them!

APPENDICES

A. California Demographics	
○ *California Population by Age/Sex, Year 2000*	*Exhibit A.1*
○ *Percent Change from 2000 to 2020*	*Exhibit A.2*
B. Bureau of Labor Statistics Training Levels	
C. Benefits for Competing and Caregiver Occupations	
D. Occupational Information Network (O*NET)	
○ *Glossary of Skills, Knowledges, and Abilities with Scale Benchmarks*	*Exhibit D.1*
○ *Trunk Strength Levels*	*Exhibit D.2*
○ *Extent Flexibility Levels*	*Exhibit D.3*
○ *Static Strength Levels*	*Exhibit D.4*
○ *Stamina Levels*	*Exhibit D.5*
○ *Explosive Strength Levels*	*Exhibit D.6*
○ *Scale Types and Benchmarks*	*Exhibit D.7*
○ *Comparison of Potentially Stressful Characteristics for Caregiver and Competing Occupations*	*Exhibit D.8*
○ *Values and Needs for Competing Occupations*	*Exhibit D.9*
○ *Values and Needs for Caregiver Occupations*	*Exhibit D.10*
E. Holland Interest Types	
F. Resources for Career Exploration	

APPENDIX A: California Demographics

EXHIBIT A.1 – California Population by Age/Sex, Year 2000

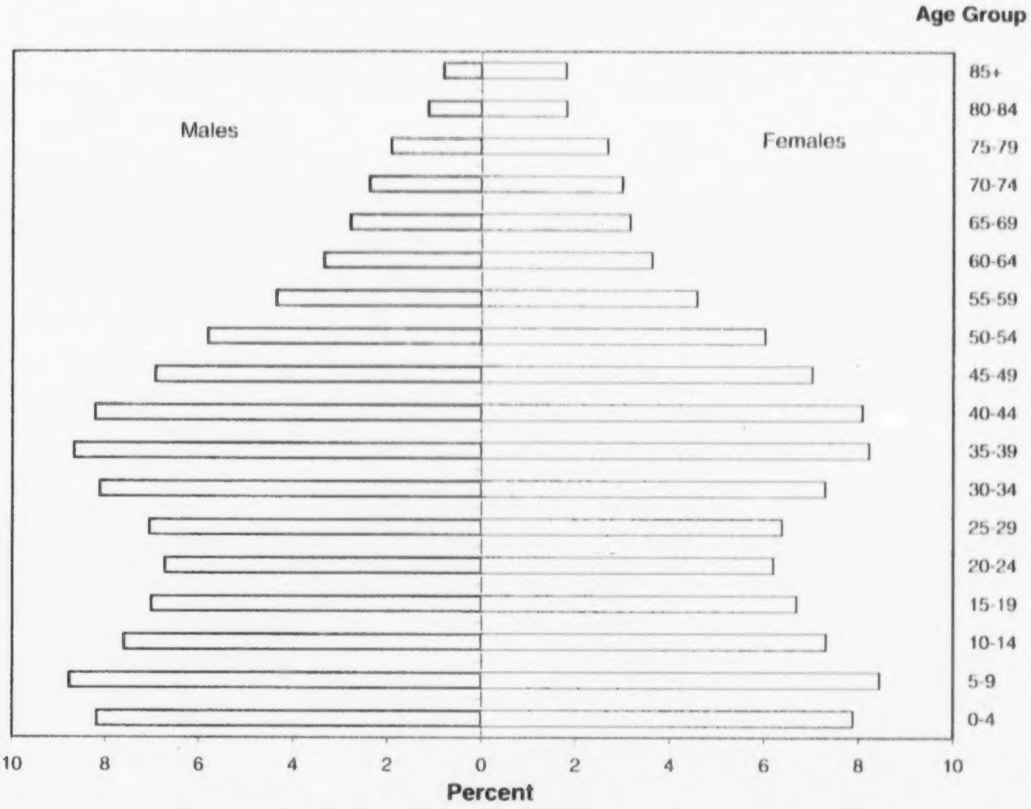
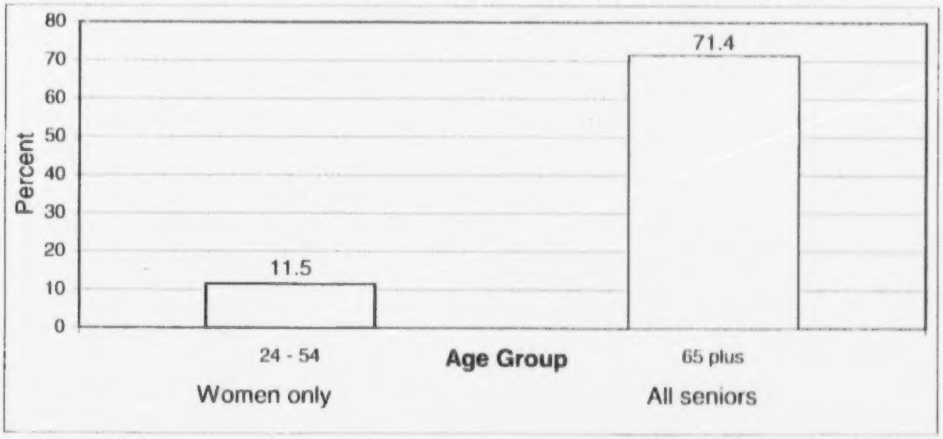


EXHIBIT A.2 – Percent Change from 2000 to 2020



Source: California Department of Finance Projections Report, 1998.

APPENDIX B: Bureau of Labor Statistics Training Levels

Training Level	**Bureau of Labor Statistics (BLS) Training Definition** The Bureau of Labor Statistics (BLS) training levels uses a classification system that provides a national measurement of how much training or experience an occupation requires for most workers to become proficient. BLS has identified 11 training levels ranging from short-term on the job training (level 11), to first professional degree (level 1), for a physician.	Number of Occupations	Number of Workers in Millions
1	***First professional degree*** is the minimum preparation required for entry into several professions, including law, medicine, dentistry, and the clergy. Completion of this academic program usually requires at least 2 years of full-time academic study beyond a bachelor's degree. *Examples of occupations in this category:* law, medicine, dentistry, and the clergy.	7	1.7
2	***Doctoral degree*** usually requires at least 3 years of full-time academic work beyond the bachelor's degree. Completion of this program is required for entry into 6 occupations in academia and the physical, biological, and social sciences. *Examples of occupations in this category:* positions in academia and the physical, biological, and social sciences.	6	1
3	***Master's degree*** programs usually require 1 or 2 years of full-time study beyond the bachelor's degree. *Examples of occupations in this category:* urban planner, management analyst, and librarian.	10	1.4
4	***Work experience in an occupation requiring a bachelor's or higher degree*** is comprised of managerial occupations that require experience in a related non-managerial occupation. *Examples of occupations in this category:* engineers who advance to engineering manager. It is very difficult to become a personnel, training, or labor relations manager without first gaining experience as a specialist in one of these fields.	14	8.1
5	***Bachelor's degree*** requiring at least 4 but not more than 5 years of full-time academic work after high school. *Examples of occupations in this category:* mechanical engineer, pharmacist, recreational therapist, teacher, and landscape architect.	64	13.9
6	***Associate's degree*** usually requires at least 2 years of full-time academic work after high school. *Examples of occupations in this category:* Most occupations in this category are health related, such as registered nurse, respiratory therapist, and radiologic technologist. Also included are science and mathematics technicians and paralegals.	16	4
7	***Vocational training*** is provided in postsecondary vocational school or by taking job-related college courses that do not result in a degree. Some programs take less than a year to complete and lead to a certificate or diploma. Others last longer than a year but less than 4 years. *Examples of occupations in this category:* Occupations in this category include some that only require completion of the training program, such as travel agent, and those in which people who complete the program must pass a licensing exam before they can go to work, such as barber and cosmetologist.	29	7.2

Training Level	Bureau of Labor Statistics (BLS) Training Definition	Number of Occupations	Number of Workers in Millions
8	***Skills developed through work experience in a related occupation*** including occupations in which skills may be developed from hobbies or other activities besides current or past employment or from service in the Armed Forces. *Examples of occupations in this category:* cost estimators, who need prior work experience in one of the construction trades; police detectives, who are selected based on their experience as police patrol officers; and lawn service managers, who may be hired based on their experience as groundkeepers.	39	9.9
9	***Long-term on-the-job training*** includes occupations that generally require more than 12 months of on-the-job training or combined work experience and formal classroom instruction before workers develop the skills needed for average job performance. *Examples of occupations in this category:* electrician, bricklayer, and machinist. Also included in this type of training are intensive occupation-specific employer-sponsored programs that workers must successfully complete before they can begin work. These include fire and police academies and schools for air traffic controllers and flight attendants. In other occupations—insurance sales and securities sales, for example—trainees take formal courses, often provided at the job site, to prepare for the required licensing exams. Individuals undergoing training are generally considered to be employed in the occupation. This group of occupations also includes musicians, athletes, actors, and other entertainers, occupations that require natural ability that must be developed over several years.	89	13.7
10	***Moderate length on-the-job training*** includes occupations in which workers can achieve average job performance after 1 to 12 months of combined on-the-job experience and informal training. This can include observing experienced workers. Individuals undergoing training are generally considered to be employed in the occupation. This training relies on trainees watching experienced workers and asking questions. Trainees are given progressively more difficult assignments as they demonstrate their mastery of lower level skills. *Examples of occupations in this category:* dental assistants, drywall installers and finishers, operating engineers, and machine operators.	119	16.2
11	***Short-term on-the-job training*** provides average job performance in just a few days or weeks by working with and observing experience employees and by asking questions. *Examples of occupations in this category:* cashier, bank teller, messenger, highway maintenance worker, and veterinary assistant.	120	49.7

Source: Darrel Patrick Wash, "A New Way to Classify Occupations by Education and Training," *Occupational Outlook Quarterly*, Winter 1995-96, p. 29 Note: data are national level figures

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APPENDIX C: Benefits for Competing and Caregiver Occupations

OCCUPATION TITLE	Medical Ins	Dental Insurance	Vacation	Sick Leave	Retirement Plan	Vision Insurance	Life Insurance	Child Care	Other
Adjustment Clerks (Customer Service Representatives)	83%	77%	80%	74%	64%	62%	70%	5%	40%
Cashiers	66%	56%	62%	54%	44%	43%	43%	25%	15%
Child Care Workers	55%	42%	61%	58%	28%	27%	24%	35%	15%
Combined Food Preparation and Service Workers	58%	56%	53%	49%	45%	43%	41%	25%	8%
Correctional Officers & Jailers	100%	100%	100%	100%	100%	100%	80%	39%	37%
Counter Clerks & Retail Clerks	52%	34%	53%	38%	29%	22%	26%	5%	19%
Dental Assistants	60%	56%	85%	68%	51%	11%	18%	4%	19%
Emergency Medical Techs	89%	87%	81%	68%	68%	71%	62%	1%	5%
Fitness Trainers & Aerobics Instructors*	38%	20%	35%	25%	23%	13%	16%	5%	0%
Food Preparation Workers	56%	50%	51%	45%	41%	41%	45%	28%	23%
General Office Clerks	79%	63%	80%	68%	55%	44%	85%	4%	27%
Medical Assistants	71%	43%	77%	73%	56%	31%	32%	3%	37%
Receptionists & Information Clerks	62%	58%	59%	58%	54%	52%	52%	44%	22%
Retail Salespersons	75%	61%	70%	59%	50%	44%	50%	20%	12%
Security Guards	54%	47%	54%	38%	34%	33%	39%	2%	22%
Shipping, Receiving, & Traffic Clerks	60%	57%	57%	53%	62%	53%	56%	47%	26%
Social & Human Service Assistants	82%	67%	81%	76%	44%	50%	48%	7%	22%
Teacher Assistants	62%	64%	61%	67%	50%	53%	40%	10%	21%
Waiters and Waitresses	43%	35%	34%	21%	15%	19%	21%	1%	21%
Average, Competing Occupations	**65%**	**56%**	**65%**	**57%**	**48%**	**43%**	**44%**	**16%**	**21%**
Nursing Aides, Orderlies, and Attendants	**77%**	**69%**	**78%**	**69%**	**48%**	**47%**	**51%**	**7%**	**12%**
Personal and Home Care Aides	**44%**	**30%**	**44%**	**39%**	**28%**	**19%**	**17%**	**6%**	**6%**
Home Health Aides	**55%**	**48%**	**53%**	**46%**	**37%**	**35%**	**35%**	**7%**	**17%**

Source: Employment Development Department, Labor Market Information Division, California Cooperative Occupational Information System (CCOIS), *Occupational Outlook Reports*, 1997, 1998, and 1999

Note: The California Cooperative Occupational Information System (CCOIS) is a partnership of the Employment Development Department (EDD), local public employment and training providers, educators, economic developers, planners, and employers. The goal of the partnership is to improve the match between employers' labor needs and the skills of job seekers. The CCOIS accomplishes this by providing specific, localized and current information for use in making better training and labor market decisions. Each year, the CCOIS conducts surveys of hundreds of occupations throughout the state. Each local agency contracting with the State conducts surveys on 15 to 25 occupations that it considers to have the greatest interest to the local community.

Data are representative of those counties where the occupation was surveyed rather than the whole state. The number of counties surveyed for each occupation varied from a low of three to a high of thirty-two out of the fifty-eight counties in California.

* Fitness Trainers & Aerobics Instructors is included in a broad group called Athletic Trainers.

APPENDIX D: Occupational Information Network (O*NET)

What is O*NET?

O*NET is part of the US Department of Labor/Employment and Training Administration's workforce development strategy to build and display critical information for job seekers and employers in a user-friendly manner. O*NET is designed to serve as an occupational/labor market information resource for public and private sector use and development.

O*NET is designed to be the nation's most comprehensive resource of occupational information, with a database system that includes 400+ descriptors about each occupation. This in-depth data is a Web-based application that provides user-friendly access to the O*NET database of occupational information. O*NET OnLine is accessed at http://online.onetcenter.org/ and can be used to:

- develop effective job descriptions quickly and easily,
- expand the pool of quality candidates for open positions,
- define employee and/or job-specific success factors,
- align organizational development with workplace needs,
- refine recruitment and training goals, and
- design competitive compensation and promotion systems.

Development of O*NET Data

Technical reports are available which describe the development of O*NET data. These reports may be accessed and downloaded at http://www.onetcenter.org/rd/index.html

The exhibits in section D are derived from the O*NET database.

EXHIBIT D.1 – Glossary of Skills, Knowledges, and Abilities with Scale Benchmarks

Note that this glossary contains only those skills, knowledges, and abilities that were among the ten most important to either the caregiver or competing occupations. See the O*NET OnLine at http://online.onetcenter.org/main.html for a comprehensive list of skills, knowledges, and abilities.

Definition	Scale	Benchmark Samples
Active Listening: Listening to what other people are saying and asking questions as appropriate	100	
	85	Presiding as judge in a complex legal disagreement
	57	Answering inquiries regarding credit references
	28	Taking a customer's order
	0	Not relevant
Arm-Hand Steadiness: The ability to keep the hand and arm steady while making an arm movement or while holding the arm and hand in one position.	100	Requires extreme steadiness to move the arm and hand or to hold them in position.
	90	Cutting facets in diamonds
	58	Threading a needle
	21	Lighting a candle
	14	Requires only a little steadiness to move the arm and hand or to hold them in one position.
	0	Not relevant
Biology: Knowledge of plant and animal living tissue, cells, organisms, and entities, including their functions, interdependencies, and interactions with each other and the environment.	100	Requires knowledge of advanced biological, physiological, and ecological systems, their interactions, and management
	97	Isolating and identifying a microscopic virus
	77	Investigating the effects of pollution on marine plants and animals.
	42	Dissecting a frog
	17	Feeding domestic animals
	14	Requires knowledge of basic biological, physiological, and ecological principles
	0	Not relevant
Chemistry: Knowledge of the composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods.	100	Requires knowledge of complex chemicals, their properties, composition, structure, and possible interactions
	90	Developing a safe commercial cleaner
	57	Using proper concentration of chlorine to purify water
	21	Using a common household bug spray
	14	Requires knowledge of common-place chemicals and their use
	0	Not relevant
Clerical: Knowledge of administrative and clerical procedures and systems such as word processing systems, filing and records management systems, stenography and transcription, forms design principles, and other office procedures and terminology.	100	Requires knowledge of advanced clerical, stenographic, and word processing procedures and records management systems.
	74	Organizing storage system for company forms
	44	Typing 30 words per minute
	31	Filing letters alphabetically
	14	Requires knowledge of simple clerical and filing.
	0	Not relevant

EXHIBIT D.1 – Glossary of Skills, Knowledges, and Abilities with Scale Benchmarks

Definition	Scale	Benchmark Samples
Communications & Media: Knowledge of media production, communication, and dissemination techniques and methods including alternative easy to inform and entertain via written, oral, and visual media.	100	Requires knowledge of complex multiple communications methods and media to inform and entertain different and varied audiences
	91	Writing a novel
	74	Being a radio disk jockey
	54	Writing a thank you note
	14	Requires knowledge of how to use simple communications methods and media to inform or entertain a limited audience
	0	Not relevant
Coordination: Adjusting actions in relation to others' actions	100	
	85	Working as director of a consulting project calling for interaction with multiple subcontractors
	57	Working with others to put a new roof on a house.
	28	Scheduling appointments for a medical clinic
	0	Not relevant
Customer & Personal Service: Knowledge of principles and processes for providing customer and personal services including needs assessment techniques, quality service standards, alternative delivery systems, and customer satisfaction evaluation techniques.	100	Requires knowledge of complex customer and personal service principles and processes for identifying and meeting complex demands of multiple clients with diverse needs.
	92	Responding to citizen's request for assistance after a major natural disaster
	71	Catering a large wedding.
	57	Working as a day care aide supervising ten children. Running a hospital cleaning service
	28	Providing air flight arrival times over the phone. Processing customer dry-cleaning drop-off
	14	Requires knowledge of basic customer and personal service processes for meeting demands of single clients with simple needs
	0	Not relevant
Education & Training: Knowledge of instructional methods and training techniques including curriculum design principles, learning theory, group and individual teaching techniques, design of individual development plans, and test design principles.	100	Requires in-depth knowledge of numerous relevant facts and multiple instructional techniques to teach experts in a given field
	84	Designing a training program for new employees
	71	Teaching a high general science course
	60	Leading a quality improvement seminar
	27	Showing someone how to bowl
	14	Requires knowledge of single instructional approaches to teach simple tasks to students
	0	Not relevant

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EXHIBIT D.1 – Glossary of Skills, Knowledges, and Abilities with Scale Benchmarks

Definition	Scale	Benchmark Samples
English Language: Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar	100	Requires fluent knowledge of advanced English in vocabulary, complex grammatical rules, and pronunciation
		Teaching a college English class
	82	Editing a feature article in a local newspaper
	60	Reading a complicated historical novel
	50	Writing a thank-you note
	21	Requires elementary knowledge of English vocabulary, grammar, and pronunciation
	14	
	0	Not relevant
Information Gathering: Knowing how to find information and identifying essential information.	100	
	85	Analyzing industry indices and competitors' annual reports to determine feasibility of expansion
	57	Conducting an employee opinion survey
	28	Looking up procedures in a manual
	0	Not relevant
Information Ordering: The ability to correctly follow a given rule or set of rules in order to arrange things or actions in a certain order. The things or actions can include numbers, letters, words, pictures, procedures, sentences, and mathematical or logical operations.	100	Requires putting in order a large amount of information using two or more complex rules
	88	Assembling a nuclear warhead
	68	Mixing chemicals according to a specific sequence so they do not become toxic
	34	Following the correct steps to change a tire
	18	Putting things in numerical order
	14	Requires putting in order a small amount of information according to a simple rule
	0	Not relevant
Judgment & Decision Making: Weighing the relative costs and benefits of a potential action.	100	
	85	Deciding whether a manufacturing company should invest in new robotics technology
	57	Evaluating a loan application for degree of risk
	28	Deciding how scheduling a break will affect work flow
	0	Not relevant
Manual Dexterity: The ability to quickly make coordinated movements of one hand, a hand together with its arm, or two hands to grasp, manipulate, or assemble objects.	100	Requires very fast coordinated use of one hand, a hand and arms, or two hands to grasp, place, move, or assemble objects
	98	Performing open-heart surgery using surgical instruments
	58	Packaging oranges in crates as quickly as possible.
	17	Screwing a light bulb into a lamp socket
	14	Requires some speed and coordination to grasp, place, move, or assemble objects with one hand, a hand and arm, or two hands
	0	Not relevant
Mathematics: Using mathematics to solve problems	100	
	85	Developing a mathematical model to stimulate and resolve an engineering problem
	57	Calculating the square footage of a new home under construction
	28	Counting the amount of change to be given to a customer
	0	Not relevant

EXHIBIT D.1 – Glossary of Skills, Knowledges, and Abilities with Scale Benchmarks

Definition	Scale	Benchmark Samples
Mathematics: Knowledge of numbers, their operations, and interrelationships including arithmetic, algebra, geometry, calculus, statistics, and their applications	100	Requires knowledge of advanced mathematical concepts and operations such as calculus, non-linear algebra, and statistics
	85	Deriving a complex mathematical equation
	60	Analyzing data to determine areas with the highest sales.
	15	Adding two numbers
	14	Requires knowledge of basic mathematical operations such as multiplication, addition, and subtraction
	0	Not relevant
Medicine and Dentistry: Knowledge of the information and techniques needed to diagnose and treat injuries, diseases, and deformities. This includes symptoms, treatment alternatives, drug properties and interactions, and preventive health-care measures.	100	Requires in-depth knowledge of human anatomy and physiology and methods for diagnosing and treating complicated medical symptoms or problems
	98	Performing open-heart surgery
	78	Diagnosing appendicitis from a patient's symptoms
	64	Filling a tooth cavity
	38	Taking a person's blood pressure
	15	Using a small bandage
	14	Requires general knowledge of the human body and methods for treating simple medical symptoms and problems
	0	Not relevant
Memorization: The ability to remember information such as words, numbers, pictures, and procedures	100	Requires remembering a large amount of complex material over a long period of time
	84	Reciting the Gettysburg Address after studying it for 15 minutes
	57	Reciting the first names of the five people you just met
	17	Remembering the number on your bus to be sure you get back on the right one
	14	Requires remembering a small amount of simple material for a short period of time
	0	Not relevant
Monitoring: Assessing how well one is doing when learning or doing something	100	
	85	Reviewing corporate productivity and developing a plan to increase productivity
	57	Monitoring a meeting's progress and revising the agenda to ensure that important topics are discussed
	28	Proofreading and correcting a letter
	0	Not relevant
Near Vision: The ability to see details of objects a t a close range (within a few feet of the observer)	100	Requires fine visual distinctions at a close range
	88	Detecting minor defects in a diamond
	68	Reading the fine print of a legal document
	40	Reading dials on the car dashboard
	14	Requires gross visual distinctions at a close range
	0	Not relevant
Number Facility: The ability to add, subtract, multiply, or divide quickly and accurately	100	Requires fast and accurate calculations using many different operations, with complex numbers
	92	Manually calculating the flight path of an aircraft, taking into account speed, fuel, wind, and altitude
	65	Computing the interest payment that should be generated from an investment
	41	Balancing a checkbook
	17	Adding 2 and 7
	14	Requires simple calculations when more than enough time is available
	0	Not relevant

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EXHIBIT D.1 – Glossary of Skills, Knowledges, and Abilities with Scale Benchmarks

Definition	Scale	Benchmark Samples
Oral Comprehension: The ability to listen to and understand information and ideas presented through spoken words and sentences	100	Requires understanding complex or detailed spoken sentences that contain unusual words and phrases
		Understanding a lecture on advanced physics
	78	Understanding a coach's oral instructions for a sport
	54	Understanding a television commercial
	25	Requires understanding short or simple spoken sentences that contain common words and phrases
	14	
	0	Not relevant
Oral Expression: The ability to communicate information and ideas in speaking so others will understand	100	Requires speaking in a clear and well organized way to communicate complicated ideas to others
	91	Explaining advanced principles of genetics to college freshmen
	54	Giving directions to a lost motorist
	25	Canceling newspaper delivery by phone
	14	Requires speaking to communicate simple ideas to others
	0	Not relevant
Problem Identification: Identifying the nature of problems.	100	
	85	Analyzing corporate finances to develop a restructuring plan
	57	Identifying and resolving customer complaints
	28	Comparing invoices of incoming articles to ensure they meet required specifications
	0	Not relevant
Problem Sensitivity: The ability to tell when something is wrong or is likely to go wrong. It does not involve solving the problem, only recognizing there is a problem.	100	Requires recognizing very unusual or complex problems and identifying all elements of the problem
	80	Recognizing an illness at an early stage of disease when there are only a few symptoms
	55	Recognizing from the mood of prisoners that a prison riot is likely to occur
	18	Recognizing that an unplugged lamp won't work
	14	Requires recognizing common or simple problems
	0	Not relevant
Psychology: Knowledge of human behavior and performance, mental processes, psychological research methods, and the assessment and treatment of behavioral and affective disorders	100	Requires knowledge of complex human behavior, advanced methods of psychological research, evaluation, and treatment
	91	Treating a person with a severe mental illness
	78	Developing a job performance appraisal system
	54	Understanding the impact of alcohol on human responses
	32	Soothing a sad friend
	25	Monitoring several children on a playground
	14	Requires knowledge of basic concepts of human behavior
	0	Not relevant
Public Safety and Security: Knowledge of weaponry, public safety, and security operations, rules, regulations, precautions, prevention, and the protection of people, data, property	100	Requires knowledge of advanced safety rules and procedures, security needs and operations, and use of complicated weapons systems
	88	Commanding a military operation
	71	Securing a crime scene
	57	Inspecting a building site for safety violations
	35	Loading and shooting a weapon
	15	Using a seatbelt
	14	Requires knowledge of basic safety rules and procedures, security operations, and use of simple weapons
	0	Not relevant

EXHIBIT D.1 – Glossary of Skills, Knowledges, and Abilities with Scale Benchmarks

Definition	Scale	Benchmark Samples
Reading Comprehension: Understanding written sentences and paragraphs in work related documents.	100	
	85	Reading a scientific journal article describing surgical procedures
	57	Reading a memo from management describing new personnel policies
	28	Reading step-by-step instructions for completing a form
	0	Not relevant
Service Orientation: Actively looking for ways to help people	100	
	85	Directing relief agency operations in a disaster area
	57	Making flight reservations for customers, using airline reservation system.
	28	Asking customers if they would like cups of coffee
	0	Not relevant
Social Perceptiveness: Being aware of others' reactions and understanding why they react the way they do	100	
	85	Counseling depressive patients during a crisis period.
	57	Being aware of how a co-worker's promotion will affect a work group
	28	Noticing that customers are angry because they have been waiting too long
	0	Not relevant
Speaking: Talking to others to effectively convey information	100	
	85	Arguing a legal case before the supreme court
	57	Interviewing applicants to obtain personal and work history
	28	Greeting tourists and explaining tourist attractions
	0	Not relevant
Speech Clarity: The ability to speak clearly so that it is understandable to a listener	100	Requires speaking many complex words in clear fashion
	82	Giving a lecture to a large audience
	50	Making announcements over the loud speaker at a sports event
	20	Calling the numbers in a bingo game
	14	Requires speaking a few simple words in a clear fashion
	0	Not relevant
Speech Recognition: Requires hearing and understanding complex speech that is unclear or distorted	100	Requires hearing and understanding complex speech that is unclear or distorted
	82	Understanding a speech presented by someone with a strong foreign accent
	57	Identifying a former customer's voice over the telephone
		Recognizing the voice of a coworker
	21	Requires hearing and understanding simple speech under normal conditions
	14	
	0	Not relevant
Static Strength: The ability to exert maximum muscle force to lift, push, pull, or carry objects	100	Requires use of all the muscle force possible to lift, carry, push, or pull a very heavy object
	90	Lifting 75-pound bags of cement onto a truck
	55	Pulling a 40-pound sack of fertilizer across the lawn
		Pushing an empty shopping cart
	17	Requires use of a little muscle force to lift, carry, push, or pull a light object
	14	
	0	Not relevant

EXHIBIT D.1 – Glossary of Skills, Knowledges, and Abilities with Scale Benchmarks

Definition	Scale	Benchmark Samples
Telecommunications: Knowledge of transmission, broadcasting, switching, control, and operation of telecommunications systems	100 97 61 45 31 17 14 0	Requires knowledge of complex high-tech, digital transmission and switching telecommunication systems Developing a new, world-wide telecommunications network Finding the cause of static on a line Operating a television camera Installing a satellite TV dish Dialing a phone Requires knowledge of simple telecommunications equipment and their use Not relevant
Therapy and Counseling: Knowledge of information and techniques needed to rehabilitate physical and mental ailments and to provide career guidance including alternative treatments, rehabilitation equipment and its proper use, and methods to evaluate treatments effects	100 85 60 27 14 0	Requires knowledge of counseling and therapy for treating complicated or difficult mental, emotional, or physical conditions or situations Counseling an abused child. Designing a physical therapy program to rehabilitate stroke victims Providing job counseling to the unemployed Putting ice on a sprained ankle Requires knowledge of basic counseling and therapy for treating simple mental, emotional, and physical conditions or situations Not relevant
Writing: Communicating effectively with others in writing as indicated by the needs of the audience	100 85 57 28 0	Writing a novel for publication. Writing a memo to staff outlining new directives. Taking a telephone message Not relevant
Written Comprehension: The ability to read and understand information and ideas presented in writing	100 92 60 24 14 0	Requires understanding complex or detailed written sentences that contain unusual words and phrases Understanding an instruction book on repairing a missile guidance system Understanding an apartment lease Understanding signs on the highway Requires understanding short or simple written sentences that contain common words and phrases Not relevant
Written Expression: The ability to communicate information and ideas in writing so others will understand	100 92 54 17 14 0	Requires clear and well organized use of words and sentences to communicate complicated ideas to others in writing Writing an advanced economics textbook Writing a job recommendation for a subordinate Writing a note to remind someone to take something out of the freezer to thaw Requires use of words and sentences to communicate simple ideas to others in writing Not relevant

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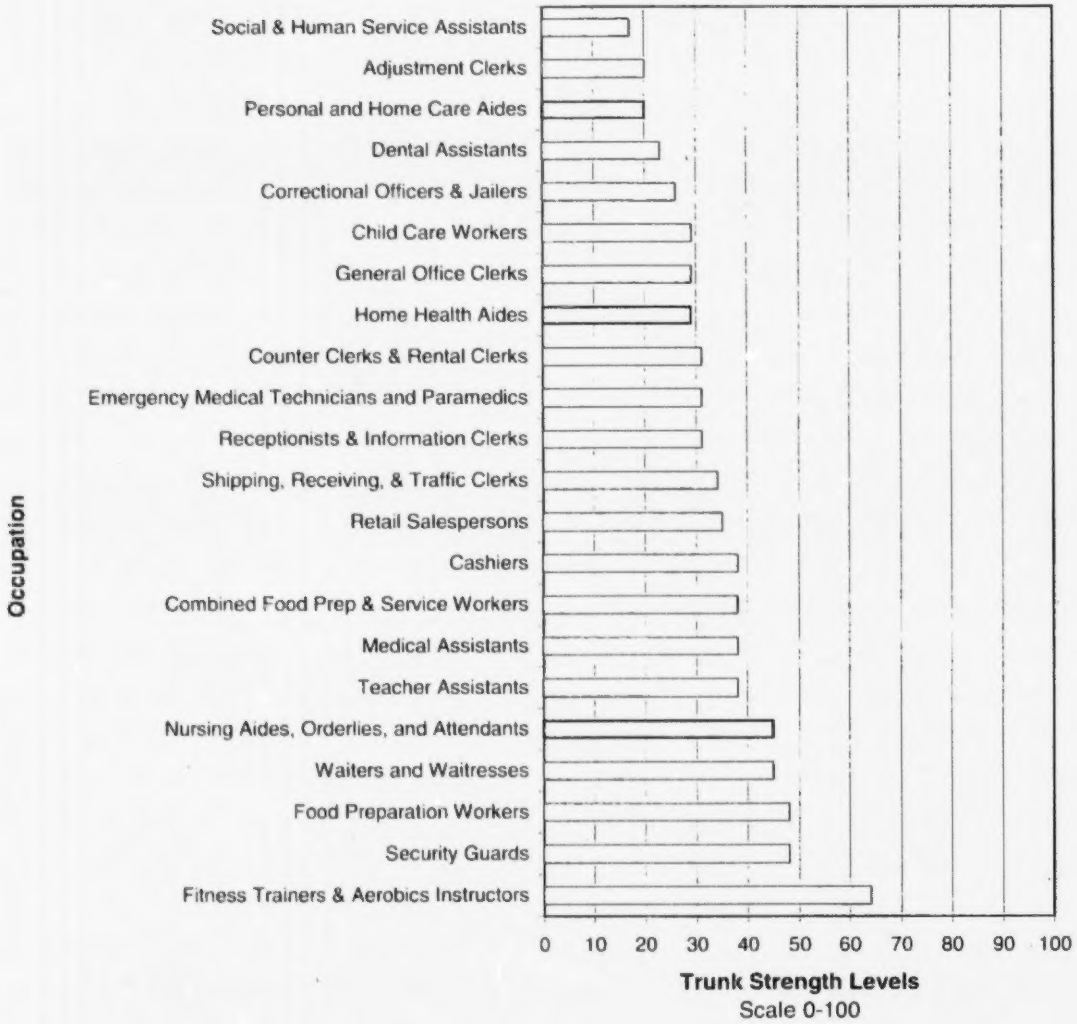
EXHIBIT D.2 – Trunk Strength Levels

Trunk Strength Levels

Trunk Strength is the ability to use the abdominal and lower back muscles to support part of the body continuously over time without fatiguing



Benchmarks

100 Requires use of all the abdominal and lower back muscle force possible to hold up or move part of the body for a long period of time.
93 Doing 100 it ups
57 Shoveling snow for a half-hour to clear a walkway
21 Sitting up in an office chair
14 Requires use of a little abdominal and lower back muscle force to hold up or move part of the body for a short time

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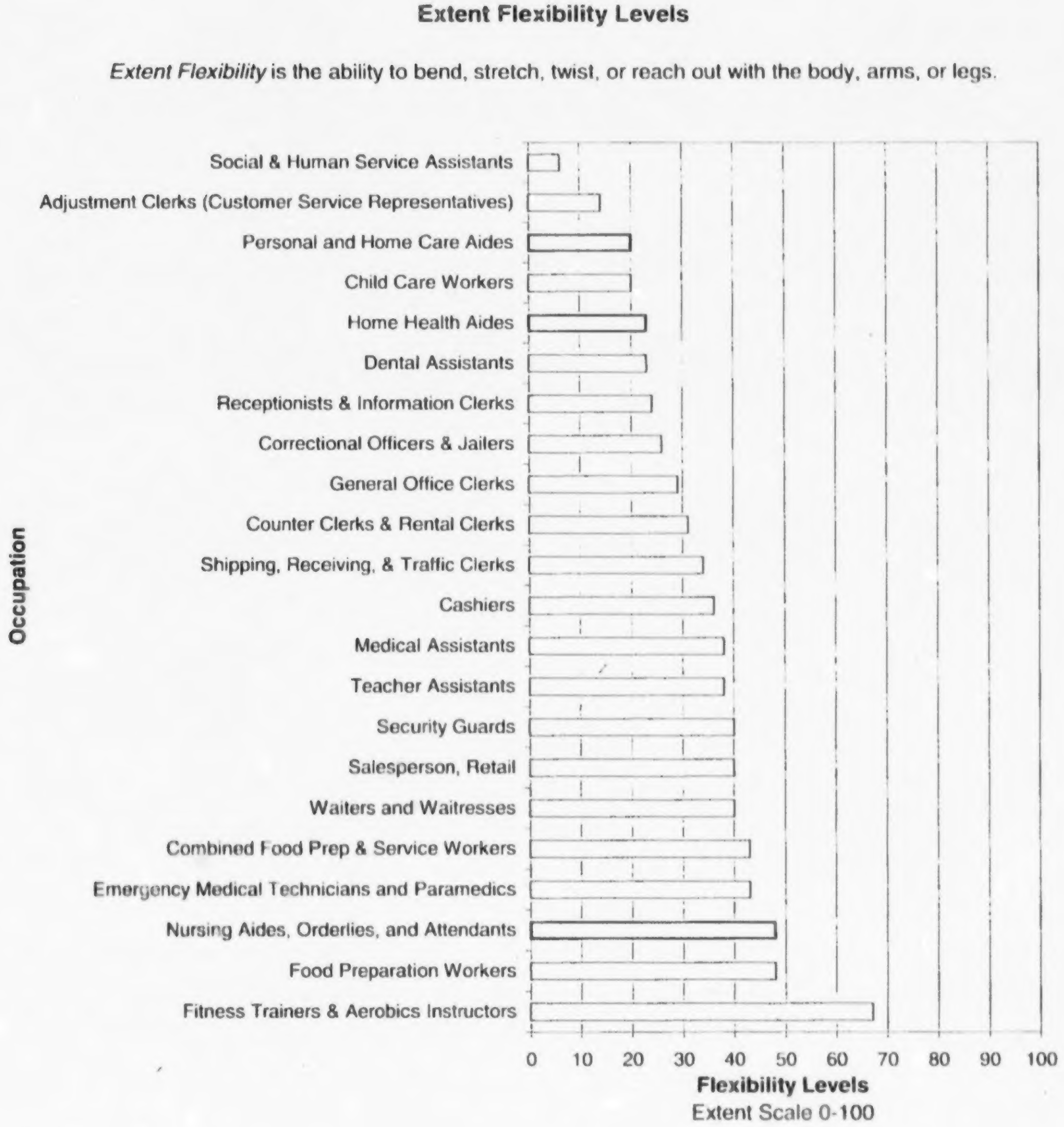
EXHIBIT D.3 – Extent Flexibility Levels



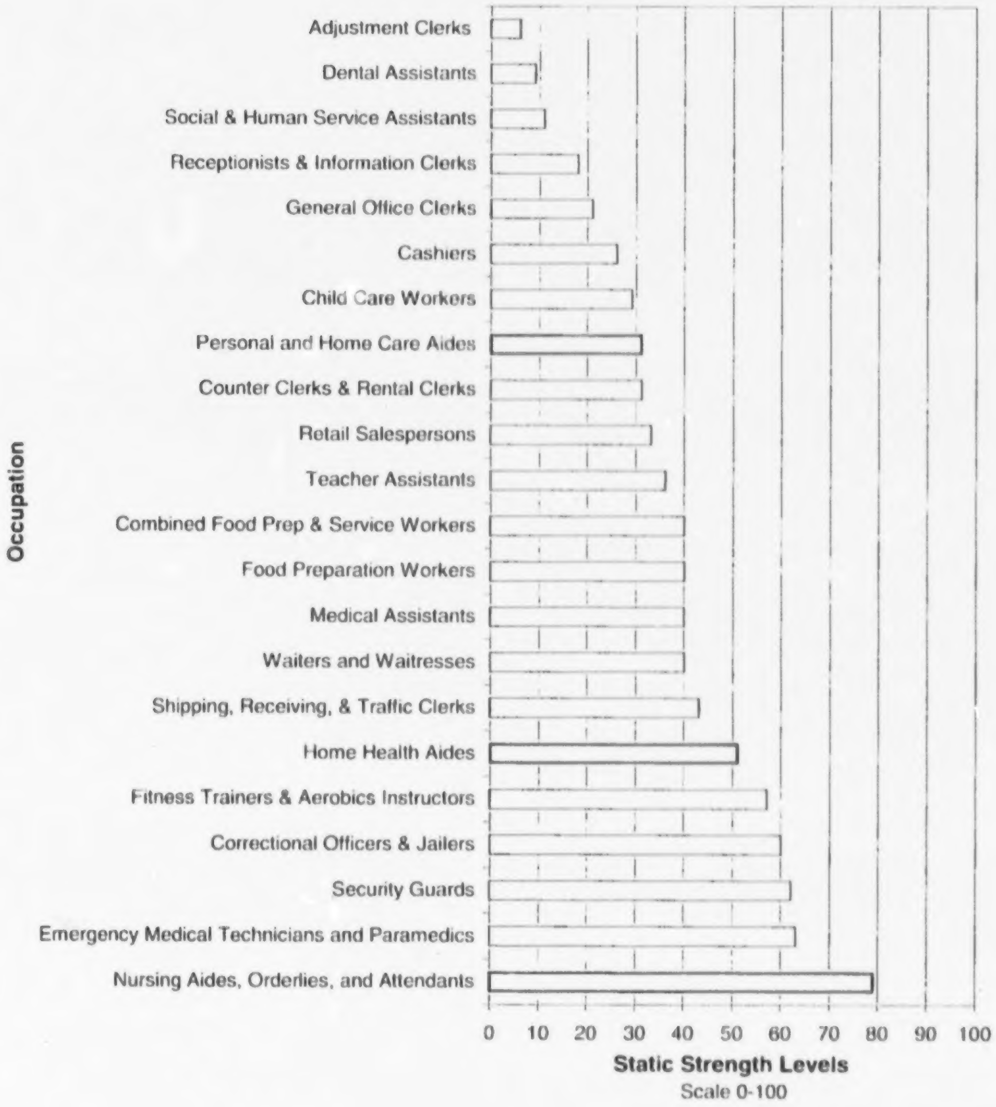
Benchmarks

100 Requires a high degree of bending, stretching, twisting, or reaching out into unusual positions.
83 Working under a car dashboard to repair the heater.
50 Reaching for a box on a high warehouse shelf.
26 Reaching for a microphone in a patrol car.
14 Requires a low degree of bending, stretching, twisting, or reaching out.

EXHIBIT D.4 – Static Strength Levels

Static Strength Levels

Static strength is the ability to exert maximum muscle force
to lift, push, pull, or carry objects



Benchmarks

- 100 Requires use of all the abdominal and lower back muscle force possible to hold up or move part of the body for a long period of time.
- 93 Doing 100 sit-ups.
- 57 Shoveling snow for a half-hour to clear a walkway.
- 21 Sitting up in an office chair.
- 14 Requires use of a little abdominal and lower back muscle force to hold up or move part of the body for a short time.

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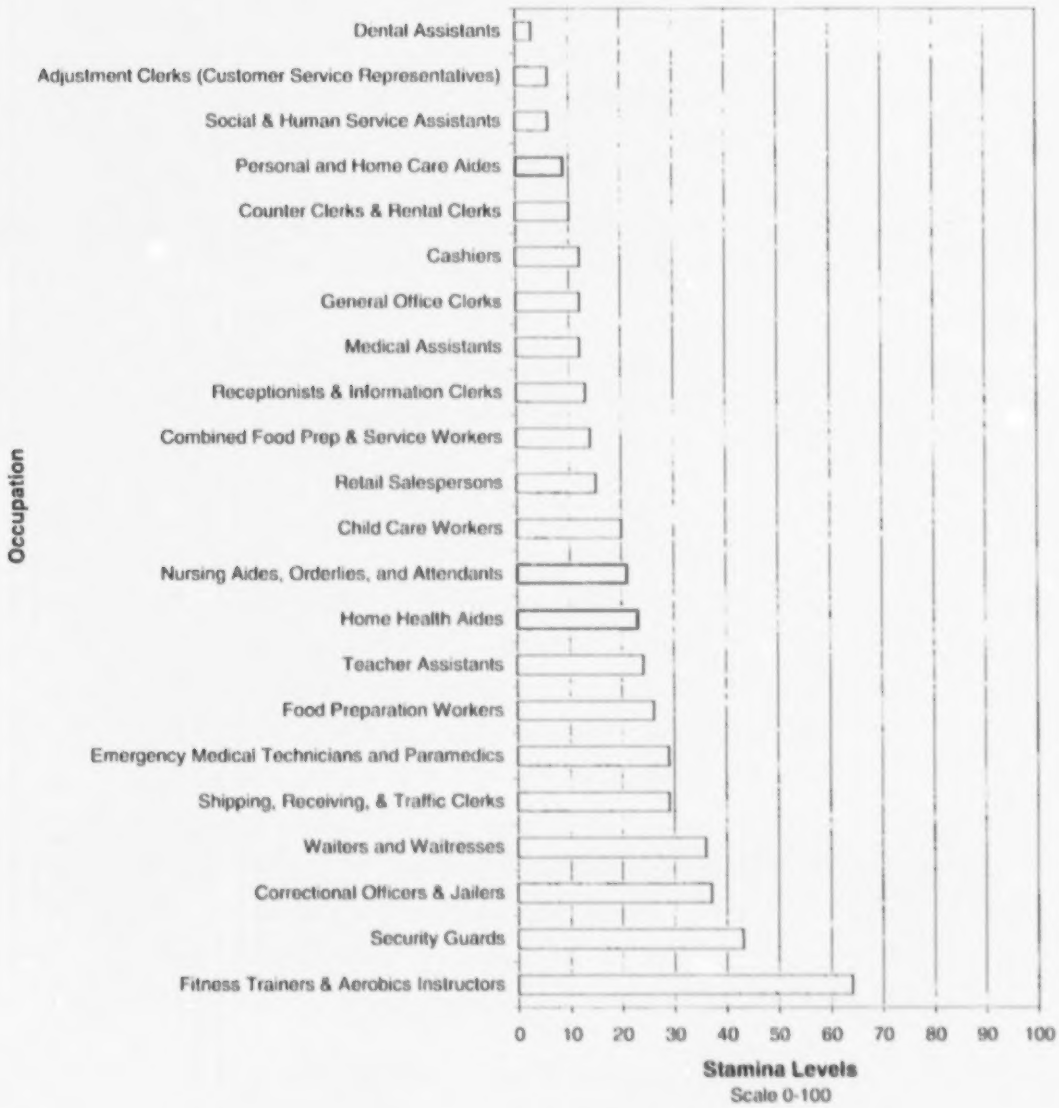
EXHIBIT D.5 – Stamina Levels

Stamina Levels

Stamina is the ability to exert one's self physically over long periods of time without getting winded or out of breath



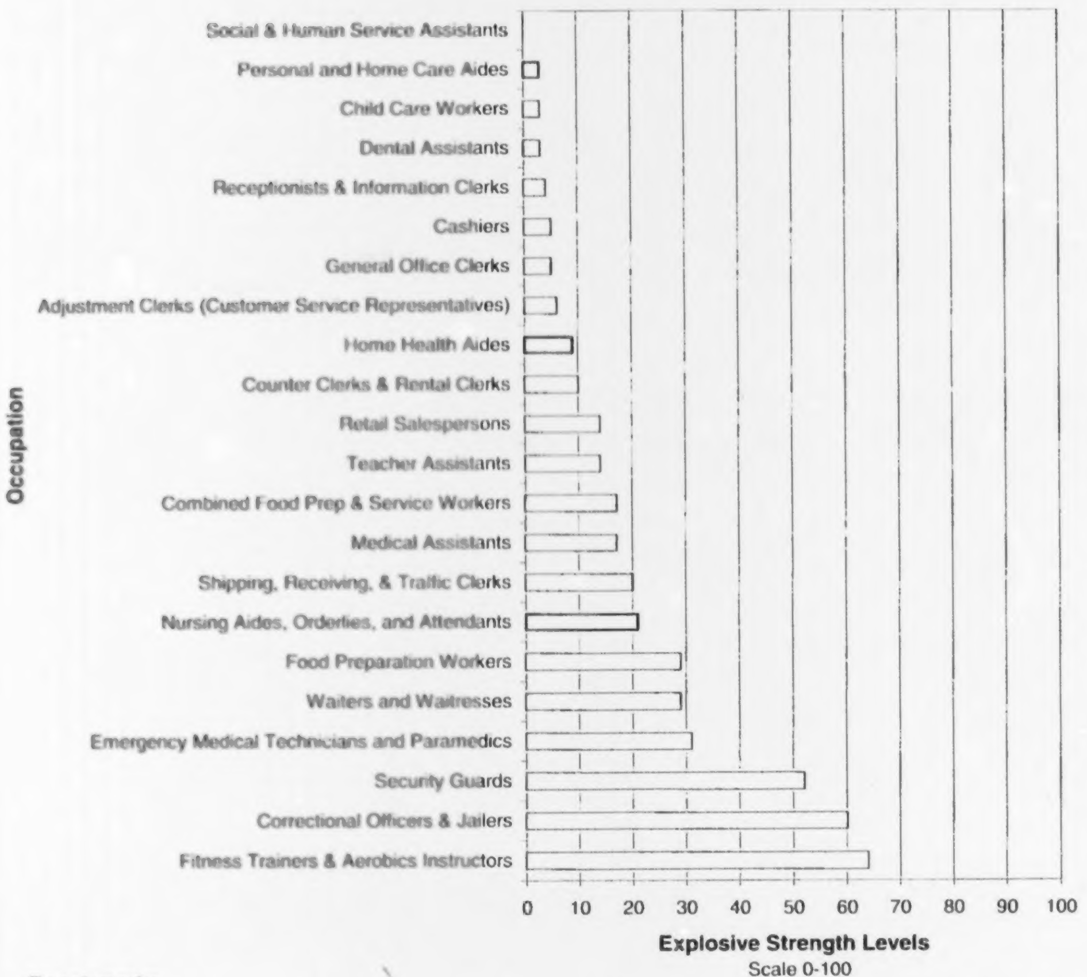
Benchmarks

100	Requires physical activity of the whole body over a long time, with great strain on the heart and lungs.
86	Running a 10-mile race.
57	Climbing six flights of stairs.
17	Walking a quarter of a mile to deliver a letter.
14	Requires physical activity of the whole body over a short time, with little strain on the heart and lungs.

EXHIBIT D.6 – Explosive Strength Levels

Explosive Strength Levels

Explosive Strength is the ability to use short bursts of muscle force
to propel oneself (as in jumping or sprinting), or to throw an object



Benchmarks

100 Requires bursts of all the muscle force possible to propel one's own body weight or objects.
93 Propelling (throwing) a shot-put in a track meet.
79 Running up a flight of stairs with fire equipment.
57 Jumping onto a 3-foot high platform.
31 Hitting a nail with a hammer.
14 Requires bursts of a little muscle force to move one's own body weight or objects.

EXHIBIT D.7 – Scale Types and Benchmarks

Scale Type	Value	Benchmark Labels
Amounts of Contact	100	Very Extensive Contact--Constant contact with others is required.
	50	Moderate Contact—Some contact with others is required; about half of work time spent in contact with others.
	0	Very Little Contact—Almost no contact with others is required.
How Serious?	100	Extremely Serious—Substantial costs, loss of reputation, damage to physical plant, or serious injury or death to self, other workers, or the public.
	50	Moderately Serious—Some loss of time, money, or damage to equipment.
	0	Mildly Serious—Minimal loss of time or effort or minor inconvenience to customers.
Deal with Physically Aggressive People	100	Always
	75	Often
	50	Sometimes
	25	Almost Never
	0	Never (or does not apply)
Degree of Injury	100	Injury resulting in total impairment or death.
	80	Injury resulting in permanent partial impairment.
	60	Injury resulting in loss of more than one work day.
	40	Injury resulting in loss of up to one work day.
	20	Injury requiring first aid.
	0	No treatment required.
Responsible for Health & Safety	100	Very Substantial Responsibility—Others' health and safety depends almost entirely on actions of worker.
	57	Moderate Responsibility—Must be careful to avoid injury to others.
	14	Very Limited Responsibility—Has little responsibility for others' health and safety.
	0	None—No responsibility for the health and safety of others.
Importance	100	Extremely important
	80	Very important
	60	Important
	40	Somewhat
	20	Minimally important
	0	Does not apply
Likelihood of Injury	100	Very high possibility
	85	High possibility
	71	Fairly high possibility
	57	Some possibility
	42	Limited possibility
	28	Very limited possibility
	14	Almost no possibility
	0	No possibility

Source: Trefoil, Occupational Viewer 2000, O*NET in it

EXHIBIT D.8 – Comparison of Potentially Stressful Characteristics for Caregiver and Competing Occupations

Characteristic Definitions	Scale Type*	Home Health Aide	Nursing Aides Orderlies & Attendants	Personal and Home Care Aides	Mean for Caregiver Occupations	*Mean for Competing Occupations
Consequences of Error. How serious would the result usually be if the worker made a mistake that was not readily correctable?	How Serious	47	67	37	50	42
Deal with Physically Aggressive People. How frequently does this job require the worker to deal with physical aggression of violent individuals?	Frequency	10	29	15	18	17
Diseases/Infections. How often does this job expose the worker to diseases/infections?	Frequency	50	88	26	55	14
Diseases/Infections. If injury due to exposure to disease/infection were likely to occur while performing this job, how serious would be the likely outcome?	Degree of Injury	32	57	25	38	16
Diseases/Infections. What is the likelihood the worker would be injured as the result of being exposed to diseases/infections while performing this job?	Likelihood of Injury	29	48	20	32	11
Importance of Being Sure All Is Done. How important is it to be sure that all the details of this job are performed and everything is done completely?	Importance	64	80	80	75	69
Job-Required Social Interaction. How much does this job require the worker to be in contact (face-to-face, by telephone, or otherwise) with others in order to perform it?	Amount of Contact	90	89	93	91	74
Responsibility for Health and Safety of Others. How responsible is the worker for others' health and safety on this job?	Responsible for Health & Safety	57	69	49	58	35

Source: Trefoil, *Occupational viewer 2000*, O*NET in it

* Scale 0-100. See Exhibit D.7

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EXHIBIT D.9 – Values and Needs for Competing Occupations

Standardized Work Values Corresponding Needs	*1	*2	*3	*4	*5	*6	*7	*8	*9	*10	*11	*12	*13	*14	*15	*16	*17	*18	*19	Mean
RELATIONSHIPS	**58**	**55**	**70**	**58**	**54**	**59**	**67**	**78**	**68**	**56**	**58**	**51**	**61**	**69**	**56**	**58**	**50**	**72**	**68**	**61**
Social Service	50	44	94	34	44	53	72	97	78	38	41	50	78	69	50	56	13	66	66	58
Moral Values	63	59	59	84	56	63	69	59	63	72	72	69	50	75	66	50	84	72	69	65
Co-workers	63	63	56	56	63	63	59	78	63	59	63	34	56	63	53	69	53	63	69	60
SUPPORT	**61**	**58**	**46**	**48**	**66**	**57**	**53**	**51**	**53**	**48**	**58**	**54**	**61**	**55**	**61**	**65**	**57**	**61**	**55**	**56**
Supervision, Human Relations	69	59	44	50	72	59	56	56	59	50	66	59	66	63	59	69	63	69	53	60
Company Policies & Practices	63	56	56	50	72	53	56	53	72	47	53	56	63	59	69	56	59	66	47	58
Supervision, Technical	53	59	38	44	53	59	47	44	28	47	56	47	56	44	56	69	50	63	69	52
WORKING CONDITIONS	**55**	**45**	**52**	**40**	**49**	**49**	**55**	**47**	**53**	**40**	**55**	**44**	**52**	**54**	**54**	**54**	**47**	**49**	**41**	**49**
Security	63	59	63	47	81	50	69	69	66	47	53	56	56	66	56	50	53	59	41	57
Activity	66	56	69	59	66	44	53	50	69	59	69	44	59	53	66	56	56	66	59	57
Variety	44	22	53	28	41	41	50	69	59	31	50	31	59	53	44	56	28	47	22	44
Independence	38	53	34	50	34	56	34	19	28	44	53	53	41	31	41	53	53	31	31	42
Working Conditions	72	47	56	34	34	69	66	28	53	34	66	44	59	59	66	69	50	69	47	54
Compensation	47	31	34	22	38	38	56	47	44	25	41	34	38	59	50	41	44	44	44	41
ACHIEVEMENT	**52**	**22**	**47**	**8**	**52**	**36**	**53**	**83**	**72**	**14**	**44**	**42**	**53**	**53**	**45**	**52**	**28**	**61**	**23**	**44**
Achievement	53	25	53	9	56	38	56	88	78	16	47	47	56	56	44	56	28	59	25	46
Ability Utilization	50	19	41	6	47	34	50	78	66	13	41	38	50	50	47	47	28	47	22	41
RECOGNITION	**47**	**27**	**38**	**17**	**46**	**34**	**44**	**43**	**63**	**19**	**45**	**35**	**50**	**44**	**36**	**47**	**32**	**48**	**16**	**38**
Social Status	47	22	38	6	44	34	50	63	66	16	44	34	47	53	38	41	28	53	9	38
Advancement	53	47	34	44	47	50	47	31	47	34	63	28	50	41	38	63	47	38	22	44
Authority	50	19	44	9	59	16	28	34	81	9	25	50	56	31	38	28	22	44	13	33
Recognition	38	19	38	9	34	34	50	44	59	16	47	28	47	50	31	56	31	44	22	36
INDEPENDENCE	**48**	**18**	**48**	**14**	**31**	**29**	**25**	**49**	**77**	**11**	**36**	**36**	**50**	**21**	**32**	**48**	**30**	**38**	**25**	**34**
Autonomy	44	28	53	19	19	38	31	44	69	13	41	44	53	28	38	53	41	28	28	37
Creativity	44	13	44	6	31	22	22	38	84	6	31	19	47	16	28	44	16	28	13	28
Responsibility	56	13	47	16	44	28	22	66	78	16	38	47	50	19	31	47	34	31	34	37
Combined Mean	**54**	**39**	**50**	**31**	**50**	**44**	**50**	**59**	**62**	**31**	**49**	**44**	**55**	**49**	**47**	**54**	**41**	**55**	**38**	**47**

*1	Adjustment Clerks (Customer Service Representatives)
*2	Cashiers
*3	Child Care Workers
*4	Combined Food Preparation & Service Workers
*5	Correctional Officers & Jailers
*6	Counter Clerks & Rental Clerks
*7	Dental Assistants
*8	Emergency Medical Technicians & Paramedics
*9	Fitness Trainers & Aerobics Instructors
*10	Food Preparation Workers
*11	General Office Clerks
*12	Human & Social Service Assistants
*13	Medical Assistants
*14	Receptionists & Information Clerks
*15	Retail Salespersons
*16	Security Guards
*17	Shipping, Receiving & Traffic Clerks
*18	Teacher Assistants
*19	Waiters & Waitresses

Extent Scale 0-100

Source: Trefoil, *Occupational Viewer 2000* with O*NET in it

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EXHIBIT D.10 – Values and Needs for Caregiver Occupations

STANDARDIZED WORK VALUES Corresponding Needs	Home Health Aides	Nursing Aides, Orderlies & Attendants	Personal & Home Care Aides	Value Mean
RELATIONSHIPS	**61**	**75**	**64**	**67**
Social Service	94	84	100	93
Moral Values	69	72	59	67
Co-workers	22	69	31	41
SUPPORT	**34**	**55**	**52**	**47**
Supervision, Human Relations	34	59	53	49
Company Policies and Practices	34	53	56	48
Supervision, Technical	34	53	47	45
WORKING CONDITIONS	**51**	**48**	**48**	**49**
Security	53	66	56	58
Activity	50	63	47	53
Variety	53	50	53	52
Independence	53	41	56	50
Working Conditions	50	38	44	44
Compensation	44	34	34	37
ACHIEVEMENT	**42**	**44**	**45**	**44**
Achievement	53	44	53	50
Ability Utilization	31	34	38	34
RECOGNITION	**31**	**27**	**39**	**32**
Social Status	44	34	41	40
Advancement	25	28	31	28
Authority	22	25	47	31
Recognition	34	22	38	31
INDEPENDENCE	**32**	**11**	**47**	**30**
Autonomy	44	16	56	39
Creativity	25	13	38	25
Responsibility	28	6	47	27
Combined Mean	**43**	**43**	**49**	**45**

Extent Scale 0-100

Source: Trefoil, *Occupational Viewer 2000* with O*NET in it

APPENDIX E: Holland Interest Types

Along with values, interests contribute to work satisfaction. Interests generally refer to the like or dislike of activities. The interest component of Department of Labor's Occupational Information Network (O*NET) draws on the research of John L. Holland whose interest assessment theory and related assessment tools are widely used in schools, colleges, and one stop centers. Holland's theory proposes that people function best and find job fulfillment in work environments that are in harmony with their personalities.

Occupational Classification	**Realistic**	**Investigative**	**Artistic**	**Social**	**Enterprising**	**Conventional**	**Symbol**
Adjustment Clerks (Customer Service Representatives)	22	33	17	61	67	89	**CES**
Cashiers	50	17	17	33	56	83	**CER**
Child Care Workers	33	28	44	94	28	28	**SAR**
Combined Food Preparation and Service Workers	89	11	22	28	39	39	**RCE**
Correctional Officers & Jailers	83	17	17	67	44	44	**RSE**
Counter Clerks & Rental Clerks	50	17	17	39	67	83	**CER**
Dental Assistants	67	33	17	83	50	44	**SRE**
Emergency Medical Technicians and Paramedics	67	56	33	89	33	39	**SRI**
Fitness Trainers & Aerobics Instructors	67	33	33	83	56	39	**SRE**
Food Preparation Workers	89	11	17	22	33	39	**RCE**
General Office Clerks	39	17	11	28	39	94	**CRE**
Medical Assistants	50	39	22	83	33	67	**SCR**
Receptionists and Information Clerks	22	17	17	67	72	83	**CES**
Retail Salespersons	44	22	28	56	89	39	**ESR**
Security Guards	44	22	17	83	67	50	**SEC**
Shipping, Receiving & Traffic Clerks	61	22	11	22	39	89	**CRE**
Social & Human Service Assistants	28	22	44	94	39	61	**SCA**
Teacher Assistants	39	33	44	94	33	56	**SCR**
Waiters and Waitresses	50	17	28	83	67	50	**SEC**
Mean of Competing Occupations	**52**	**25**	**24**	**64**	**50**	**59**	**SCR**
Home Health Aides	61	17	22	89	22	33	SRC
Nursing Aides, Orderlies, and Attendants	72	28	22	89	50	33	SRE
Personal and Home Care Aides	61	17	17	83	33	28	SRE
Mean of Caregiver Occupations	**65**	**21**	**20**	**87**	**35**	**31**	**SRE**

Extent Scale 0-100

Source: Trefoil, *Occupational Viewer 2000* with O*NET in it

APPENDIX F: Resources for Career Exploration

Occupational exploration resources available on the Internet:

America's Career InfoNet - Developed by the Department of Labor (DOL), America's Career InfoNet provides a wealth of information under the categories of Career Exploration, General Outlook, Wages and Trends, State Profile, and Resource Library	http://www.acinet.org/acinet/
CaCTIS (California Career & Training Information System- CaCTIS links county-based information about the following: Job requirements, training program locations, wages, and job openings.	http://www.cactis.ca.gov/
California Career Planning Guide – A step by step guide to finding a good job that matches the individual's skills, abilities, and interests.	http://www.soicc.ca.gov/#CCPG
California Occupational Guides describe 350 individual occupations or groups of related occupations in detail with statewide wage and trend information.	http://www.calmis.ca.gov/htmlfile/subject/GUIDE.htm
California Professional & Business License Handbook 1999 contains a list of occupations licensed by the State of California along with licensing requirements, license fees, and the name and address of the licensing authority.	http://commerce.ca.gov/doc/business/small/management/pub/license/
***California Training and Education Providers* (CTEP)** CTEP offers information on local schools and colleges including name, address, phone numbers, fax numbers, and the educational and training programs offered. Links to transit and map web sites to provide transportation information to training seekers.	http://www.soicc.ca.gov/ctep/
Career Guide to Industries provides information on available careers by industry, including the nature of the industry, working conditions, employment, occupations in the industry, training and advancement, earnings and benefits, and employment outlook.	http://stats.bls.gov/cghome.htm
Career Opportunities is an industry-based exploration of careers in the following industries: Information Technology, Manufacturing, Hospitality, Tourism, and Recreation, Arts, Media & Entertainment, and Health Services. Available for statewide and 12 School-to-Career regions	http://www.calmis.ca.gov/htmlfile/subject/CareerOps.htm
Employment and Wages by Occupation lists the most current wages for each occupation: entry-level hourly, mean hourly, mean annual, and hourly at the 25th, 50th (median), and 75th percentiles. Regional, county, and statewide data are available.	http://www.calmis.ca.gov/file/occup$/OES$.htm
Occupational Outlook Handbook, published by DOL. Profiles occupations with national trend and wage information.	http://stats.bls.gov/ocohome.htm
***Occupational Outlook Quarterly (*OOQ,)**, another DOL publication, features articles on occupations, trends, education and training, occupations and industries, choosing and changing jobs, college graduates, workers without a bachelor's degree.	http://stats.bls.gov/opub/ooq/ooqhome.htm
Occupational Outlook Reports provide information about occupations selected by each of the local California Cooperative Occupational Information System (CCOIS) partners.	http://www.calmis.ca.gov/htmlfile/ccois/oor.htm
ONET OnLine offers in depth skills, tasks, and related occupational information. ONET replaces the *Dictionary of Occupational Titles* and contains crosswalks to other occupational classification systems.	http://online.onetcenter.org/main.html

Bibliography

Assembly Bill 2876 Chapter 7, Section 11022c, 1-10

Bolles, Richard N., *What Color Is Your Parachute?,* Ten Speed Press, Berkeley, CA, 2000.

Built to Work, A Common Framework for Skills Standards, National Skill Standards Board, Washington, DC, 2000. Retrieved from www.nssb.org

The Center for the Health Professions, *The Hidden Health Care Workforce, A Report of the California Twenty-first Century Workforce Project*, University of California, San Francisco, 1999.

The Changing Nature of Work, National Research Council, National Academy Press, 1999. Retrieved from www.nap.edu/html/occup_analysis/index.html

California Nursing Homes, Federal and State Oversight Inadequate to Protect Residents in Homes With Serious Care Violations, GAO, Testimony Before the Special Committee on Aging, U.S. Senate, July 28, 1998.

California's Professional & Business License Handbook, California Trade and Commerce Agency and Employment Development Department, Labor Market Information Division, Sacramento, 1999.

California Projections of Employment 1998-2008, Employment Development Department, Labor Market Information Division, Sacramento, 2000.

Caring Till It Hurts, Service Employees International Union (SEIU), 1997.

Coffman, Janet, MPP, and Joanne Spetz, "Maintaining an Adequate Supply of RNs in California," *Image: Journal of Nursing Scholarship*, Volume 31, Number 4, Fourth Quarter, 1999.

--------, *Nursing Workforce Challenges in California*, The Center for the Health Professions, University of California, San Francisco, April 2000.

A Crisis for Caregivers: Health Insurance Out of Reach for Nursing Home Workers, A Special Report from SEIU, North America's Largest Healthcare Union, 1998.

Direct-care Health Workers: The Unnecessary Crisis in Long-Term Care, Paraprofessional Healthcare Institute, New York, 2000.

Division of Occupational Safety and Health, *Guidelines for Security and Safety of Health Care and Community Service Workers*, "Nonfatal Assaults in the Workplace," March 10, 1998. Retrieved from http://www.dir.ca.gov/dosh/dosh_publications/hcworker.html

Employment Projections by Occupation, Employment Development Department, Labor Market Information Division, Sacramento, 2000. Retrieved from: http://www.calmis.ca.gov/htmlfile/subject/occproj.htm

Ettinger, Judith M. [Ed.], *Improved Career Decision Making in a Changing World*, Garrett Park Press, Garrett Park, MD, 1991.

Fleishman, Edwin A. et al, "Knowledges" in Norman J. Peterson et al Volume I: Report, *Development of Prototype Occupational Information Network (O*NET) Content Model*, Utah Department of Employment Security, 1995.

Gottfredson, Gary D.and John L. Holland, *Dictionary of Holland Occupational Codes*, Psychological Assessment Resources, Inc., 3rd ed. Odessa, Florida, 1996.

Harrington, Charlene, Ph.D., R.N., et al, "Experts Recommend Minimum Nurse Staffing Standards for Nursing Facilities in the United States," *The Gerontologist*, Vol. 40, No. 1, 2000.

--------, et al, "Nursing Home Staffing and Its Relationship to Deficiencies," *Journal of Gerontology*, Vol. 55B, No. 5, 2000.

--------, et al, *Nursing Facilities, Staffing, Residents and Facility Deficiencies, 1992 Through 1998*, Department of Social and Behavioral Sciences, University of California, San Francisco, January 2000.

Henly Julia R., "Mismatch in the Low-Wage Labor Market: Job Search Perspective," in *The Low-Wage Labor Market: Challenges and Opportunities for Economic Self-Sufficiency*, The Urban Institute, Washington, D.C., 1999. Retrieved from: http://aspe.hhs.gov/hsp/lwlm99/henly.htm

Holland, J.L., *Making of vocational choices: A theory of vocational personalities and work environments*, (3rd ed.), Psychological Assessment Resources, Inc., Odessa, FL, 1997.

In Search of Skills Standards for 2000 & Beyond, Employment Development Department, Labor Market Information Division, Sacramento, 1996.

Landy, Frank J. and Don A. Trumbo, *Psychology of Work Behavior*, The Dorsey Press, Homewood, IL, 1976.

"Occupational Injuries and Illnesses and Work-related Fatalities Technical Note," *Compensation and Working Conditions*, Bureau of Labor Statistics, Summer 2000.
Retrived from: http://stats.bls.gov/oshhome.htm

OES Employment and Wages by Occupations, 1999, Employment Development Department, Labor Market Information Division, Sacramento

O*NET (Occupational Information Network), Department of Labor, 1998 Retrieved from http://online.onetcenter.org

"A Preventable Labor Crises Within Long-term Care," Paraprofessional Healthcare Institute, Bronx, New York, August 1999.

"Record Share of New Mothers in Labor Force, Census Bureau Reports," *United States Department of Commerce News Release*, October 24, 2000.

Rounds, James et al, *Development of Occupational Interest Profiles for O*NET*, National Center for O*NET Development, Raleigh, N.C., 1999.

Spetz, Joanne et al, *Nursing Staff Trends in California Hospitals: 1977 through 1995*, Public Policy Institute of California, October 1996.

Stress…At Work, National Institute for Occupational Safety and Health (NIOSH), Cincinnati, 1999.

"Violence in the Workplace," *Current Intelligence Bulletin 57*, Publication No. 96-100, U.S. Department of Health and Human Services, National Institute for Occupational Safety and Health, DHSS (NIOSH), July 1996.

Wegman, Robert et al., *Work in the New Economy*, JIST Works, Inc., Indianapolis, IN, 1989.

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